DOCUMENT RESUME

ED 372 283 CE 066 913

AUTHOR Sperazi, Laura; Jurmo, Paul
TITLE Team Evaluation: Case Studies from Seven Workplace Education Programs.
INSTITUTION Literacy Partnerships, East Brunswick, NJ.
SPONS AGENCY National Inst. for Literacy, Washington, DC.
PUB DATE Jun 94
CONTRACT X257A20420
NOTE 409p.; For related documents, see CE 066 912-914.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC17 Plus Postage.
DESCRIPTORS Adult Basic Education; Case Studies; Cooperation; Cooperative Planning; Evaluation Methods; *Literacy Education; Participative Decision Making; Program Design; Program Development; Program Effectiveness; *Program Evaluation; Team Training; *Teamwork
IDENTIFIERS *Workplace Literacy

ABSTRACT

This document presents key findings about the team evaluation process used in seven workplace basic skills programs in 1993 and 1994. An introduction summarizes the methodology used to develop the case studies and key findings about the team evaluation process. These key findings present the strengths and challenges of using evaluation teams, along with recommendations for those interested in trying this approach. Recommendations include the following: evaluation teams need to create time, interest, expertise, a supportive context, a code of confidentiality, and an ethic of continuous improvement; teams need to customize the process to fit it to the site's unique needs and opportunities; teams should clarify evaluation's role in the larger program planning process; teams should develop evaluation procedures consonant with the company's culture; teams should use familiar and accessible resources; and teams need to be realistic. Six case studies describe how the team evaluation process was used in seven workplace education programs: Bull Worldwide Information Systems; Datatec Industries; Haartz Corporation; Norton Company; Project REACH; and Victoria General Hospital. Each case study follows this format: program background (history, goals, and description); background on the team (history and stakeholders represented); the process which the team went through; reflections and various appendixes, such as sample data-gathering instruments or reports generated by the teams. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 372 283

Team Evaluation:
Case Studies from Seven Workplace Education Programs

Prepared June 1994
by
Laura Sperazi and Paul Jurmo

U S DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

---

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

This study was funded
by the
National Institute for Literacy,
Washington, D.C.

Grant Award #X257A20420

The views expressed in this document are those of the authors and not necessarily those of the National Institute for Literacy.

Available from Literacy Partnerships, 14 Griffin Street, East Brunswick, NJ 08816-4806, Tel. 908/254-2237.

CE 066 913

BEST COPY AVAILABLE

Table of Contents

1
- Introduction
- Methodology
- Key Findings

2 Case Study:
Bull Worldwide
Information Systems

3 Case Study:
Datatec Industries

4 Case Study:
Haartz Corporation

5 Case Study:
Norton Company

6 Case Study:
Project REACH

7 Case Study:
Victoria General
Hospital

8

TEAM EVALUATION: CASE STUDIES FROM SEVEN WORKPLACE EDUCATION PROGRAMS

Prepared June 1994
by
Laura Sperazi and Paul Jurmo

This study was funded
by the
National Institute for Literacy,
Washington, D.C.

Grant Award #X257A20420

The views expressed in this document are those of the authors and not necessarily those of the National Institute for Literacy.

CONTENTS

Acknowledgements ii

Executive Summary iii

Introduction 1
  Background on this document 1
  How this document is organized 2
  Next steps 3

The methodology used to develop the case studies 4
  The seven sites 4
  Researchers' roles 6
  How the case studies were prepared 7

Lessons learned: Key findings about team evaluation 8
  Strengths 8
  Challenges 10
  Recommendations for those interested in trying team evaluation 13

ACKNOWLEDGEMENTS

The authors thank the following:

The National Institute for Literacy, which provided funding for the research which produced this and two companion publications.

ABC CANADA for the funding they provided for our Canadian field-site, and Sue Folinsbee who worked with us in that site and provided valued insights and support throughout.

The Massachusetts Workplace Education Initiative whose early support of team evaluation made this work possible, and whose continued support provided us with materials, access to programs, and insight into the strengths and challenges of the team evaluation process. (We especially thank Johan Uvin, former MWEI Coordinator and current Supervisor of Development in the state Division of Adult and Community Learning. His parallel work in team evaluation enriched this project considerably. Thanks also to Kathe Kirkman, the former Evaluation Specialist in the Division of Adult and Community Learning.)

Donald Cichon, Alice Oberfield Andrews, and Steve Andrews for the technical assistance they provided on instrument design and data analysis.

David Rosen for his steady support and guidance throughout this and earlier phases of our work.

The evaluation teams at Bull Worldwide Information Systems, Datatec Industries, Haartz Corporation, Norton Company, Project REACH at the State University of New York in Albany and Stony Brook, and Victoria General Hospital for their hard work, perseverance, commitment, and generous hospitality.

EXECUTIVE SUMMARY

TEAM EVALUATION:
CASE STUDIES FROM
SEVEN WORKPLACE EDUCATION PROGRAMS

In 1993 and 1994, workplace education resarchers Laura Sperazi and Paul Jurmo field-tested a team-based evaluation methodology in seven workplace education programs. This "team" approach involves key program stakeholders in a process of (1) building an education team; (2) clarifying what information the team would like to generate in an evaluation and designing a strategy and tools for collecting that information; (3) collecting, organizing, analyzing, and reporting findings; and (4) taking necessary follow-up action.

The researchers had developed this "team" or "collaborative" approach two years earlier in evaluations of workplace education programs sponsored by the Massachusetts Workplace Education Initiative and other sources. This team model was conceived as an alternative to more-familiar evaluation scenarios in which (1) program staff carry out informal monitoring of program operations and/or (2) more-formal evaluations are carried out by outside evaluation specialists.

In this project, the researchers wanted to explore the premise that evaluation carried out by a team of internal "stakeholders" could borrow the best from the existing approaches to evaluation while avoiding their limitations. More specifically, a well-planned evaluation conducted by a team of internal stakeholders could produce information meaningful to those stakeholders. It would help them understand what the program might achieve and was achieving, and identify actions which they and others might take to strengthen the program. The researchers felt that this evaluation model also had a natural "fit" with workplaces promoting team decision-making and continuous improvement, an approach to workplace organization which the researchers wanted to support.

This document presents case studies which describe how the evaluation methodology played out in the seven sites, along with

lessons which the researchers and team members learned about the evaluation process. These "lessons" are summarized below:

Strengths of the team evaluation model

a. Team evaluation can ties in with team management model. It "fits" with workplaces shifting toward collaborative decision-making and continuous improvement.
b. Team evaluation can get all stakeholders involved so the evaluation and the education program focus on meaningful outcomes.
c. Evaluation standards are developed internally, resulting in reasonable, meaningful focal points for the evaluation and the program.
d. With all stakeholders involved, evaluation can become another collectively-valued "essential program component" for which resources must be allocated.
e. Team evaluation can provide opportunities for staff development -- for all team members but especially for program participants.
f. Team evaluation can produce evaluation procedures which can be replicated by the program itself and by others.
g. Team evaluation can provide an "audience" for stakeholders' ideas.

Challenges of the team evaluation model

a. Team evaluation takes time.
b. Team evaluation requires a mix of special skills.
c. Team evaluation requires particular attitudes and values.
d. Team evaluation requires discipline.
e. If not properly done, the team evaluation process can be skewed to serve the interests of just one or a few stakeholders.
f. If confidentiality is not respected, team evaluation can needlessly jeopardize the security of those involved.
g. Team evaluation requires special knowledge and procedures to minimize bias and ensure validity and reliability.
h. It is difficult to introduce a "team" approach to evaluation in a program or workplace not already "team-oriented."

3. Recommendations for those interested in trying team evaluation

a. Evaluation teams need to have or create:

- Time
- Interest (motivation, "team values")
- Expertise
- A supportive context
- A "code of confidentiality"
- An ethic of continuous improvement

b. To ensure that teams have the above elements in place, those organizing teams should use the following team-building activities:
- Select members carefully.
- Negotiate roles.
- Stress the need for continuity.
- Provide extra training and technical assistance.
- Organize team activities to allow all members to participate actively.
- Set a "climate" of respect.

c. Teams need to customize, refine, streamline the process to fit it to the unique needs and opportunities of each site.
d. Teams should clarify where evaluation fits into the larger program planning process.
e. Teams should consider calling on the expertise of an outsider if necessary.
f. Teams should "get their feet wet" quickly, not waiting too long to start.
g. Teams should understand that their goals for the program will change as they learn more about it.
h. Teams should develop evaluation procedures consonant with the culture of the company and education program.
i. Teams should use resources which are familiar and accessible.
j. Teams should balance "product" (reports, etc.) with "process" (the dialogue created among stakeholders).
k. Teams need to be realistic and fair in what they expect from an education program.
l. Teams should beware of intra-organizational politics.
m. Funders and other "higher-ups" should show interest in the team's activities without interfering in them.
n. Teams should make recommendations which are realistic.

Primary funding for this project was provided by the National Institute for Literacy in Washington, D.C. Additional support for the Canadian field-site was provided by ABC CANADA, a national workplace education service based in Toronto.

INTRODUCTION

Background on this document

This introductory document presents key findings about the team evaluation process used in seven workplace basic skills programs in 1993 and 1994. Accompanying this document are case studies which chronicle the process of conducting team-based evaluations from the first stages of selecting and preparing a team to the final stages of reporting findings and using results to improve the program.

When we began this project, we had good working ideas about how to implement a team-based evaluation in a workplace basic skills program. We had piloted an early version of the method with six programs which were part of the Massachusetts Workplace Education Initiative in 1990-91. We had been so encouraged by the results that we continued to evolve the method with other programs in 1992.

We saw the use of evaluation teams as a promising alternative to more-familiar evaluation scenarios in which (1) evaluation is done internally by program staff on an ad hoc, informal basis, or (2) control for evaluation is put in the hands of an outside evaluation "expert." We felt that evaluation carried out by a well-organized team of internal "stakeholders" could borrow the best from the existing approaches to evaluation while avoiding their limitations. More specifically, a well-planned evaluation conducted by a team of internal stakeholders could build stakeholder understanding of and ownership for the program. We felt that this evaluation model also had a natural "fit" with workplaces promoting team decision-making and continuous improvement, an approach to workplace organization which we wanted to support.

In late 1992, the National Institute for Literacy provided us with funding to further develop this methodology with seven programs. This gave us a unique opportunity to intensively explore many of the assumptions and procedures imbedded in our earlier model. From late 1992 through early 1994, our early ideas took new shape and meaning as we interacted with the many people who became members of our evaluation teams, and who were themselves struggling to understand what workplace education programs can legitimately be expected to achieve.

At the end of this challenging process of selecting sites, trying out our team evaluation methodology, and analyzing our experience, we produced two documents:

- Team Evaluation: A Guide for Workplace Education Programs, which was prepared for other workplace education teams interested in conducting their own internal evaluations.

- This document, Team Evaluation: Case Studies from Seven Workplace Education Programs, which details the process we went through in our field sites, and analyzes that experience.

This project also produced a third document which drew on sources other than our seven field sites:

Workplace Education: Stakeholders' Expectations, Practitioners' Responses, and the Role Evaluation Might Play. Based on a review of the literature and interviews, this report analyzes the purposes of workplace education programs; approaches to workplace education; the state of the art of evaluating those programs; recent attempts to develop a new, "collaborative" program model; and steps which stakeholders might take to strengthen the field in general and evaluation in particular.

How this document is organized

This case study document is divided into seven smaller documents:

This introductory document which summarizes the methodology used to develop the case studies and key findings about the team evaluation process.

Six case studies which describe how the team evaluation process was used in a total of seven workplace education programs. Each case study includes various appendices, such as sample data-gathering instruments or reports generated by the teams.

Next steps

We feel this project has produced a tremendous amount of new knowledge about the value of -- and procedures for -- involving all stakeholders as active players in workplace basic skills efforts. Many questions remain unanswered -- some old ones and some new ones which emerged from these 1 1/2 years of experience. As we wind up this project, we look forward to working with others who would like to explore these questions further in the pursuit of creating "new and improved" approaches to workplace education.

THE METHODOLOGY USED
TO DEVELOP THE CASE STUDIES

The seven sites

The two researchers originally intended to select six workplace education programs to serve as study sites. These programs would have to have been already well-established and have met the following criteria:

1. Each program would be managed by an existing team composed of a range of stakeholders, including learners, instructors, managers, and union representatives (where a union existed). These teams would have to be interested in conducting their own evaluation and able to devote time to working with the researchers to conduct a pilot evaluation. In lieu of such an existing team, programs would have to be willing to form one for the purposes of the study.

2. The workplaces would be moving toward a "high-performance" organization model characterized by team decision-making and commitment to continuous improvement. Such a workplace would preferably also have an interest in tying its workplace education program into those larger changes in organizational structure.

Laura Sperazi chose three sites from the Massachusetts Workplace Education Initiative. She had previously served as an evaluator for various Initiative sites, and -- with her help -- the Initiative had already begun orienting its programs to a "team" approach to planning and evaluation. Through her contacts with the Initiative network, she identified three programs willing and able to participate as field sites and which met the site-selection criteria.

New Jersey-based Paul Jurmo did not have ready access to the same kind of network of workplace education programs available in Massachusetts. He used his contacts in the field to discuss the feasibility of finding three sites which met the selection criteria. After a time-consuming series of discussions with a dozen programs, he was able to find four which met the criteria. (Note that several programs expressed interest in participating, but were not sufficiently well-established to take on the additional responsibilities of participating in this research project. Also note that, to enable the study to include a site in Canada, additional funding for travel, telephone, and related costs was provided by ABC CANADA, a national technical assistance organization based in Toronto.)

The seven sites represented a mix of industries, populations served, type of instruction, and locations, as profiled below:

	INDUSTRY	POPULATION SERVED	TYPE OF INSTRUCTION
BULL WORLDWIDE INFORMATION SYSTEMS (Mass.)	Manufacturer of computer parts	Twenty-eight "associates" of mixed ethnic and language backgrounds	• 3 ESL classes
DATATEC INDUSTRIES (New Jersey)	Manufacturer of computer parts	One dozen Latina immigrant women assembly workers	ESL (in small groups organized by skill level)
HAARTZ CORP. (Mass.)	Manufacturer of vinyl fabrics	Fifty line employees, mostly white men, with a few women.	• 2 math classes • 2 language arts classes • GED class
NORTON COMPANY (Mass.)	Manufacturer of grinding wheels and related abrasive products	One hundred employees, including many older white men who have worked for the company for some time	• 3 math classes • 3 language classes • 2 blueprint reading classes • 1 introduction to measurement class • 1 machine maintenance class

STATE UNIVERSITY OF N.Y. (at Albany, NY)	Educational institution (state university)	Custodial workers on state university campus	10-week basic reading and writing course, using whole language approach.
STATE UNIVERSITY OF N.Y. (at Stony Brook, NY)	Educational institution (state university)	Two dozen custodial and maintenance workers in campus residence halls	• Initial 7-week summer math course. •Subsequent technical communications (reading and writing) course.
VICTORIA GENERAL HOSPITAL (Halifax, Nova Scotia)	Major teaching hospital for Maritime Provinces	Primarily Canadian-born hospital workers from food services, custodial, and other departments	• Basic reading, writing, math (for personal and job-related development) • GED prep.

Researchers' roles

In five of the seven sites, the researchers served as facilitators of a team evaluation process. This process varied somewhat from site to site depending on the particular needs, resources, and schedules at each site. In general, however, the process involved:

(1) forming and preparing the teams,
(2) helping the teams identify what information they needed and how they would collect it,
(3) collecting, organizing, analyzing, and reporting findings, and
(4) taking necessary follow-up actions.

In those five sites, the researchers worked with site coordinators to lead the teams through the various required steps. The researchers also documented the process and the various products (e.g., data-gathering instruments, minutes of team meetings, evaluation reports) which emerged.

In the remaining two sites (at the two State University of New York campuses), Paul Jurmo trained two workplace educators who had previously contracted to help those programs with planning- and evaluation-related needs. In the training, the consultants were introduced to the team evaluation process and figured out how they might apply it in their two sites. Paul Jurmo then maintained regular long-distance communication with the two consultants to (1) provide them with ongoing technical assistance and (2) document the evaluation process as it played out in the two sites.

How the case studies were prepared

The above interactions with the seven teams varied from six to twelve months, depending on the site. Toward the end of those interactions, the researchers compiled drafts of case studies documenting the process and lessons learned for each site. These drafts were submitted to the site teams for feedback to ensure accuracy and confidentiality. The researchers then revised the drafts accordingly and compiled them in this document.

As each case study was compiled, the feedback from team members and the researchers' personal observations were incorporated into the end of each case study. Those analyses by team members and by the researchers were then summarized and further analyzed into the following "Lessons Learned" section. In it, the researchers present what their work with the seven sites has demonstrated about the team evaluation process.

LESSONS LEARNED: KEY FINDINGS ABOUT TEAM EVALUATION

This section summarizes what the researchers learned about the team evaluation process. These findings draw directly from the project's seven test sites, as well as from prior work done by the researchers in other workplace education evaluations --"team-based" and otherwise.

This summary presents the strengths and challenges of using evaluation teams, along with recommendations for those interested in trying this approach.

1. Strengths

a. Team evaluation can tie in with team management model. The team evaluation process can complement and support the team approach to management now being adopted by many North American workplaces -- and vice versa. Companies interested in developing mechanisms for involving employees in collaborative decision-making might see a collaborative evaluation of their employee education program as an opportunity for showing what workers can do and helping them develop team decision-making skills they can use in other company contexts. Conversely, a workplace education program interested in carrying out a team evaluation will likely have a "head start" if the company within which it is operating already has a history of "teamwork"-- a collaborative ethic, mechanisms, and expertise -- which the education program can build on.

b. Team evaluation can get all stakeholders involved so the evaluation and the education program focus on meaningful outcomes. By involving a more complete range of stakeholders in identifying program goals, the team evaluation process allows (1) the evaluation to focus on those particular goals and thereby clarify for stakeholders whether their expectations are being met and (2) the education program to better know how it might serve stakeholders' needs in the future. Historically, programs and their evaluations have tended to not take into account the expectations of all stakeholders, but to define program goals and evaluation criteria more narrowly. Team evaluations have generated new interest in workplace education programs by (1) providing a system of "checks-and-balances" to ensure that all stakeholders are given a chance to decide what information to focus on in the evaluation, and (2) opening stakeholders up to a broad range of outcomes they might not previously have considered.

c. Evaluation standards are developed internally, resulting in reasonable, meaningful focal points for the evaluation and the program. The team evaluation process allows stakeholders to think critically about what a program can reasonably achieve and therefore be held accountable for. Members can, for example, get away from expecting the program to by itself "improve productivity;" instead, members can define clearer, more specific objectives for the program to focus on. This is in contrast to situations where program standards are set externally -- or even internally -- by sources who are either unfamiliar with the workplace's actual needs or who haven't given much thinking to them. When program objectives are not carefully negotiated, the resulting standards are liable to push the program down paths which do not reflect stakeholders' actual needs and interests.

d. With all stakeholders involved, evaluation and education can become collectively-valued "essential components" for which resources must be allocated. Evaluation is too often seen as an imposition or afterthought rather than an essential element of a solid program. A team evaluation process can demonstrate the value of a well-crafted evaluation to all stakeholders. They are thus more likely to invest time and other resources in evalaution in the future.

A solid evaluation can also increase the credibility of the education program itself, by demonstrating what the program is achieving and that a team of stakeholders thinks it is worth investing their time in.

e. Team evaluation can provide opportunities for staff development -- for all team members but especially for program participants. By going through a well-planned team evaluation process, all members can develop particular knowledge, values, and skills useful to the organization and individuals. For example, members can learn how to define and solve a problem, communicate with others within the organization, and develop action strategies. They can also develop self-confidence and stronger relationships and expand their vision of what they and the organization can accomplish. Participation in the team evaluation process might thus be seen as a valuable staff development activity. It can also be a unique life experience for program participants normally not expected to take on such an active leadership role.

f. Team evaluation can produce evaluation procedures which can be replicated by the program itself and by others. The process of collectively designing, using, and fine-tuning evaluation procedures is initially time-consuming. However, the resulting procedures can be considered as "templates" which can be revised and used again by the program without requiring all of the same preparations. Other programs with similar evaluation needs might borrow from those well-crafted procedures, as well, thereby saving them some of the time otherwise devoted to the design stage.

g. Team evaluation can provide an"audience" for stakeholders' ideas. The team serves as an "audience" for the ideas which team members and others might have been carrying around in their heads about the education program and the workplace. Teams can thereby call up -- and build on -- the considerable prior knowledge, positive motivations, and resources which stakeholders bring with them. Such a process can encourage stakeholders to speak up, get involved, think, and make suggestions in ways they normally would not. The team needs to be be ready to really listen and respond to those ideas -- stakeholders' "vision" about what a better program and workplace might look like.

2. Challenges

a. Team evaluation takes time. Rather than rely on a single evaluator (whether an external or internal one) to do most of the work, a team evaluation requires a number of people to commit time to the preparations and other tasks required. The process will almost inevitably have false starts, run into obstacles, and otherwise require patience and perseverance.

However, most workplaces are busy places these days, undergoing many changes, and placing many demands on employees. It is hard for most stakeholders to pay attention to the education program at all -- let alone committing time to an evaluation. This is even more true in small or short-term education programs; members are likely to wonder whether going through a time-consuming evaluation process is really worth it if the program is going to last only six months and serve twelve workers. Members lacking time will be reluctant, unwilling, or unable to participate, or -- if they do participate -- will be resentful, "looking at their watches" the whole time.

b. Team evaluation requires a mix of special skills. The process requires one or more facilitators able to study and understand the process; lead the team through the various steps -- balancing the need to encourage member initiative with the need to get the job done; know when and where to seek help; communicate clearly; and maintain a positive, productive spirit. Other team members must also have similar abilities. These include communicating clearly in written and oral form, critical thinking, making decisions in a group, finding needed information and resources, etc. (While not all members must necessarily possess every skill, those skills must somehow be available to the team if it is to do the work required.) Members lacking such skills can become confused and be unwilling or unable to participate.

c. Team evaluation requires particular attitudes and values. This approach to evaluation requires that team members have an interest in strengthening the education program, the workplace, and workers' roles. Members need to see the evaluation process as a potential way of contributing to such improvements. Members should value the notion of "teamwork" as an asset for both the education program and the larger organization. Intrinsic to teamwork are "respect," "patience," "perseverance," "listening to others," "compromise," and "consensus." Members lacking such positive attitudes will likely not feel comfortable on the team and either drop out, or interfere with or even sabotage the process. And members need to see the education program in a positive light, not as a narrow "quick fix" project for "the illiterates."

d. Team evaluation requires discipline. Conducting an evaluation -- with or without others -- is not easy. When a team is involved, special attention must be paid to making sure that members follow through on the tasks they agree to take responsibility for. Otherwise, tasks do not get completed and the facilitator or another team member has to take over for those not "pulling their weight." To ensure that jobs get done, the facilitator has the duty of keeping everyone "on task."

e. If not properly done, the team evaluation process can be skewed to serve the interests of just one or a few stakeholders. If the team is not careful, the process might become skewed to focus on issues and recommendations of interest to just one or a few stakeholders, rather than the entire group. Some team members not accustomed to or interested in the notion of "collaboration" might -- even unknowingly -- dominate meetings with their own personal agendas and effectively intimidate or "turn off" other members. Some members might use meetings as a soap box for personal grievances (perhaps not even related to the topic at hand), especially where there are no other mechanisms (like a strong union) for airing personal concerns. In workplaces where a particular stakeholder group normally does the decision-making, it will be hard for members from other groups to make their voices heard. This is particularly true in workplaces where the workforce has a significant number of immigrant workers. Their particular language abilities and cultural backgrounds might make it difficult for them to "speak up" in a team process.

f. If confidentiality is not respected, the team evaluation can needlessly jeopardize the security of those involved. A good deal of trust and procedures for ensuring "security" need to be in place to make this process work. If those asked to speak frankly are not sure that what they say will not be used against them or someone else, they will not likely be willing to say what is on their minds.

g. Team evaluation requires special knowledge and procedures to minimize bias and ensure validity and reliability. As is true with any form of evaluation, the findings of a team evaluation could end up being biased, unreliable, or invalid. This could be due to team members' bias or lack of experience.

h. It is difficult to introduce a "team" approach to evaluation in a program or workplace not already "team-oriented." As stated under "Strengths" above, a workplace already oriented to team decision-making can be a fertile context in which to conduct a team-based evaluation. Converely, workplaces (and education programs) structured along more traditional lines might not understand -- or might even resist -- the notion of team evaluation. In either case, team members need to be shown how to apply team decision-making to the particular task of education program evaluation.

3. Recommendations for those interested in trying team evaluation

a. Evaluation teams need to have or create:

- Time to do the work
- Interest; motivation to build a better education program and workplace and provide new opportunities for workers; a recognition of the value of this evaluation process; a willingness to share decision-making with others and try something new.
- Expertise to perform the various thinking, communication, and other tasks required by the process.
- A supportive context: a host organization which provides an audience for the evaluation and an infrastructure (for example, meeting rooms, a computer for data-analysis and report-writing, release time for staff to participate) where members can reinforce the team skills to be used in the evaluation process.
- A "code of confidentiality" ("trust") and procedures for maintaining the confidentiality of team activities.
- An ethic of continuous improvement; seeing evaluation as an opportunity for creative, constructive criticism to improve the organization and the education program.

b. To ensure that teams have the above elements in place, those organizing teams should use the following team-building activities :

- Select members carefully. Key decision-makers in the organization-- which include not only "higher-ups" but supervisors who can encourage or inhibit learner participation -- need to be "on board," supporting the team even if not actively involved in all its activities. Conversely, "trouble-makers" or people with "chips on their shoulder" might have to be screened out.
- Negotiate members' roles and those of others (for example, co-workers need to know why they are being invited to a focus group and groundrules for participating) involved in the evaluation. Set groundrules which all members agree to follow.
- Stress the need for continuity within the team and, therefore, commitment of members to carry out their responsibilities.
- Provide extra training and technical assistance required to develop necessary attitudes and perform particular tasks. Team members, for example, might be willing but unable to help conduct interviews simply because they never interviewed anyone before. Facilitators in various sites might develop a "buddy system" among themselves, to enable them to give each other feedback and moral support as needed.
- Organize team activities in ways which will allow *all* members to participate actively. For example, translators might be necessary for some members, or reading tasks might be reduced to allow members with more-limited reading abilities to get access to information.
- Set a "climate" of respect, willingness to listen, and a positive vision in all interactions with the team.

A facilitator might find that, even after carrying out the above team-building activities, it appears that it will not be possible to form a coherent team. The facilitator should be prepared to "just say no" to the notion of conducting a team evaluation. She or he might instead suggest that the program arrange for an outside evaluator to come in. Or the program might postpone the team evaluation idea until a time when stakeholders are ready for one.

c. Teams need to customize, refine, streamline the process to fit it to the unique needs and opportunities of each site. Members should carefully calculate what they want to accomplish and how much time and expertise they can give to the process. Facilitators should present do-able, practical tasks, organized in "chewable chunks," which produce clear rewards. Facilitators should avoid overly-academic or technical language in team meetings, keeping activities short and simple. This is done to make the process the most efficient and meaningful one possible. At the same time, streamlining must not jump over or eliminate elements which are vital to an effective evaluation.

d. Teams should clarify where evaluation fits into the larger program planning process. Ideally, teams would begin their evaluation work in the early stages of planning the program rather than after the program is already underway. Teams should also be clear about the difference between "assessment" (normally thought of as measuring individual needs and progress) and "evaluation" (a larger process of clarifying what is being achieved and deciding further actions related to the program).

e. Teams should consider calling on the expertise of an outsider if necessary. While the team evaluation process encourages members to take ownership for evaluation activities, it is a real possibility that some teams will not be able to carry out every task required. In such cases, teams should consider calling on someone from outside the team -- perhaps a professional evaluator -- to carry out some of the tasks either alone or with other team members. For example, if the team wants to generate statistical information and manipulate it in a computer database, perhaps someone with that expertise might be brought in from the local college to set up that system.

Team members can be the judge of how much responsibility they want to give to someone else, so they can avoid turning the evaluation into a more-traditional, "outside" evaluation in which members would essentially abdicate responsibility for the process. If an outsider is brought in (to, say, design a questionnaire or conduct focus groups), he or she might show other team members how to perform particular tasks so they can do them themselves the next time.

f. Teams should "get their feet wet" quickly. Teams should not be afraid to "jump in" and try collecting some information, analyzing it, reporting it, and acting on it. This can serve as an initial trial run which produces both useful data, useful expertise, and useful, concrete results. Members should not make a "big deal" out of it, dragging out the process, postponing unfamiliar tasks out of fear or a desire to "make everything perfect." When that happens, teams will likely lose or change focus and feel they then have to start all over again. Instead, members should keep in mind that the more they do it, the easier it will be.

As members gather information, they should review it and decide on appropriate actions. Avoid prolonging getting to the "action" stage. Otherwise, members might start wondering why they are gathering so much information without getting to any concrete action.

g. Teams should understand that their goals for the program will change as they learn more about it. Rather than take this as a sign that their original goals were "off target," members should welcome this change. It is a sign that the program is growing and that the team is trying to improve it by making it more relevant. Funders should also recognize this and give teams time to continually re-assess their goals as the program evolves.

h. Teams should develop evaluation procedures consonant with the culture of the company and education program. Some teams might want a relatively quick snapshot of how the program is doing and any problems that need to be attended to. In such a case, a team might simply sit down and listen to what learners and other stakeholders have to say in one or two focus groups. Other teams might want a more-formal, longer-term, in-depth study. Such a study could be done through ethnographic interviews and observation and come in a narrative "case study" format. For those oriented toward "hard data," a more-formal evaluation might also present statistics acquired through structured interviews and questionnaires and perhaps some kind of customized "test" or study of company production records or changes in the organization and learners.

Teams should realize that each of these methods of gathering, analyzing, and presenting information has its advantages and disadvantages. Narrative information should not automatically be dismissed as "lite" or "too soft;" "statistics" shouldn't automatically be seen as too technical or insensitive.

Teams should also be sensitive to the natural ways people communicate and make decisions in the company. In many cases, focus groups might be more productive ways of eliciting employees' ideas than structured, written questionnaires.

Each team should choose the evaluation procedures which make sense within the particular culture of the company and education program.

i. Teams should use resources which are familiar and accessible. For example, the company or educational institution might already use a database program for other data-analysis purposes. The education team might get access to such a resource rather than have to purchase a new one and train people to use it. Similarly, the team might call on the company communications department to help prepare an attractive version of the team's report. Members might also participate in training workshops available through the company training department or a local education institution which could help members develop expertise the team needs.

j. Teams should balance "product" with "process." It is understandable that most team members will get involved in an evaluation with the hope of producing some kind of clear "product." In this case, product is thought of as some kind of "clear evidence," "data," or "a report" which they can use to make decisions with and/or show to the program's supporters. Generating useful, readable, relevant information and getting it into the hands of intended audiences are important, as they provide tangible rewards for the team's work.

Members should keep in mind, however, that generating reliable and meaningful information requires work. They should also realize that the very process of sitting members down and giving them an opportunity to talk about the program has value. Such dialogue can build trust, understanding, shared ownership, and other support for the program. It can build a team identity and team skills which carry over into other aspects of the organization. Teams should see these benefits of the team process as "products" of possibly greater value than a neatly-packaged set of statistics or report.

k. Teams need to be realistic and fair in what they expect from an education program. Teams shouldn't expect a short-term basic skills program for a few workers to solve problems which are longer-term, company-wide, and more-complex in nature. Teams should consider doing a comprehensive workplace needs assessment, to determine what factors interfere with productivity and quality of work life. In turn, such an assessment can identify the range of initiatives a company might take to deal with those obstacles.

If, for example, employees have trouble reading work orders, it might be because the orders are poorly written; in such a case, a clear-writing initiative might be in order. If workers generally show limited interest in solving problems, it might be less due to lack of problem-solving skills than to a faulty incentive system; perhaps their interest could be increased through an employee-stock-ownership plan.

Workplace education could thereby be seen -- and evaluated -- as one of a number of changes an organization might undertake to maximize its human potential.

l. Teams should beware of intra-organizational politics. Teams need to remember that they are not operating in a vacuum and that the "politics" of the workplace will likely impact the ability of team members to collaborate. The team process can help resolve lingering suspicions and adversarial or "co-dependent" relationships by giving all stakeholders opportunities to express their views. Members should realize, however, that some stakeholders might find it difficult to participate actively due not so much to the team process as to the "baggage" they carry with them from other relationships they have in the workplace.

m. Funders and other "higher-ups" should show interest in the team's activities without interfering in them. Teams often cite funders and other "higher-ups" (e.g., high-level officials in the company, union, or educational institution) as primary audiences for their evaluation reports. If those audiences set a positive "climate" and demonstrate their interest in what the team finds, the teams will likely be motivated to do a good job. Conversely, if those "higher-ups" politely ignore the team and its findings, the team will have to look elsewhere for its motivation. Funders et al should not, however, get overly involved in the team and effectively dominate the process or distract members from what they want to focus on.

n. Teams should make recommendations which are realistic. Most evaluations will conclude that "if only we had more time and money, we could make tremendous strides." While such conclusions are probably true, teams need to be realistic in what they recommend in their evaluations.

TEAM EVALUATION AT BULL WORLDWIDE INFORMATION SYSTEMS: A CASE STUDY FROM A WORKPLACE EDUCATION PROGRAM

Prepared
by
Laura Sperazi

One of seven case studies in
"Team Evaluation:
Case Studies from Seven Workplace Education Programs,"
a report prepared in June 1994
by Laura Sperazi and Paul Jurmo

BULL WORLDWIDE INFORMATION SYSTEMS

Brighton, Massachusetts

I. PROGRAM BACKGROUND

Program history

Bull HN, Inc., is the American wholly-owned subsidiary of the French-owned Bull Worldwide Information Systems. The Brighton plant is a medium-sized manufacturer of electronic circuit boards located in Brighton, Massachusetts. While other manufacturing plants here and abroad have consistently shown a loss -- including other plants in eastern Massachusetts -- the Brighton plant has consistently shown a profit and helped to offset overall losses for the parent company.

Competition for cheap and well-made electronic circuit boards has become very keen in the international marketplace. The Brighton plant is changing its organization of work in order to continue to compete successfully. The essence of this change is that self-managed work teams assume more and more control and responsibility for all phases of work. In addition, the company has recently become ISO 9000 certified. This means that workers are required to read and follow standard operating procedures contained in training and work documents. The combination of the shift to self-managed work teams and maintaining ISO 9000 certification has made good communication, reading, and writing skills for all workers necessary and critical.[1]

---

[1] This and other descriptions of the Brighton plant contained in this case study refer to conditions from November 1992 to November 1993, the time during which the team-based evaluation was piloted. Since January 1994, conditions at the plant have changed significantly. For example, many associates are now required to work twelve hour shifts -- and others work copious amounts of overtime -- in order to complete quick-turn-around orders. With associates pressed to manufacture and deliver products as quickly and efficiently as possible, education and training appear to become less important. Although it is acknowledged that associates need to improve their skills more than ever, in the face of rigorous

Program goals

The workforce of the Brighton plant is culturally and linguistically diverse. Of the 400 "associates" employed in both the "B" Shop (where the circuit boards are made) and the "A" shop (where printed circuits are added), approximately 100 do not speak English well. The associates are Italian, Portuguese, Cape Verdian, East and Southeast Asian, and Asian Indian immigrants. Some of these associates have been with the plant for five years or more and have a good performance record, but are now being challenged to communicate in English at a level that they would not have thought possible a few years ago.

Management is committed to keeping these associates employed but the underlying message is indisputable: if you cannot keep up with the changes, your job might be in jeopardy and the plant might fail. An on-site ESL program seemed a good place to begin to provide the kind of educational support for acquiring English communication skills that these associates need. It was also understood that other associates need other types of basic skills instruction and that, in the future, the program might serve them as well. The eleven formal goals which the Planning and Evaluation Team (PET) generated and which guided the evaluation process are described in the Goals Matrix on pages 19-22.

Description of program

Twenty-eight associates were enrolled in the ESL program. Three classes were offered to accommodate shifts and personal schedules. Classes were held twice a week for two hours. If an associate attended class during a shift, s/he was given full release time. If an associate attended class before or after a shift, s/he was compensated at time and a half.

---

production schedules, the ESL and basic skills program are poorly attended. Associates, supervisors and other managers who were very supportive of expanded education programs simply have to "put production first."

From November 1992 through August 1993, the Bull Brighton plant ESL program was partially funded through a grant from the Boston Mayor's Office of Jobs and Community Service with Training Partnership Act (JTPA) 8% set-aside moneys. The company supported the program before, during, and after the grant period. The Brighton plant's educational partner is the Adult Literacy Resource Institute, a project of Roxbury Community College.

II. BACKGROUND ON THE TEAM

History of the team

The first meeting of the PET took place on November 20, 1992, a few months after the program began. David Rosen, the Program Coordinator, was familiar with the researchers' team evaluation model and had agreed -- with the consent of other team members -- that the Bull Brighton ESL program would be a good site for a trial of the method. He invited researcher Laura Sperazi to the first PET meeting, so that she could briefly introduce the evaluation process that the team would implement that year. She was to serve as facilitator at this site.

The concepts of working as a team to conduct an evaluation and linking evaluation findings to planning were already very familiar to Bull employees. Team-based management had sufficiently taken hold within management that most team members normally conducted their business in teams and were familiar both with setting goals and determining how they would know whether their goals were being met. This familiarity with team procedures meant that Ms. Sperazi's introduction of the team-based evaluation process was not surprising to most members. As the year progressed, team members would disagree to some extent on what the evaluation should measure and the time to devote to evaluation, but not on the fundamental process.

Stakeholders represented on the team

The members of the team included:

- Jane La Branche, Director of Training
- Dick Henderson, Director of Personnel

- Manuel Palomino, Training Intern
- Mike Balas, Plant Manager, "PWA"
- Ken Manganaro, Plant Manager, "PWB"
- Alberto Vigianni, Associate and student
- Reginalda Camaro, Associate and student
- David Rosen, Director of the Adult Literacy Resource Institute, and Program Coordinator
- Jim Ward, Curriculum Developer
- Melvina Green, Teacher
- Annie Yu, Teacher
- Sharon Parmalee, Training Intern, replaced Manuel Palomino in September 1993 and was later hired by the company as Program Coordinator
- Ken Robbins, Supervisor, began attending meetings in September 1993

III. THE PROCESS WHICH THE TEAM WENT THROUGH

Summary: Between November 20, 1992 and October 17, 1993, Laura Sperazi met with the Bull PET approximately twice a month for two hours. True to the purpose of a PET, team members met to discuss a broad array of program planning issues as well as how to proceed with the evaluation. As a rule, the evaluation would be one item on the agenda along with other program planning-related items. However, when the work of the evaluation intensified -- for example, when we were developing survey questionnaires or protocols for focus groups -- a PET meeting might be devoted exclusively to evaluation issues.

In the late spring of 1993, PET members agreed that a subcommittee of the PET should focus their attention on evaluation. It was getting tedious for the plant managers and other company personnel to be involved in all the details of the evaluation process. As a result of the frequency of meetings and the regular linking of evaluation issues to program planning, the evaluation facilitator functioned more like a member of the team in this program than in other settings where the number of meetings was fewer and the facilitator role more limited.

Between the late spring and early winter the PET prepared, gathered, analyzed, informally reported, and integrated into program planning information which was gathered in seven different ways:

- a student survey
- a managers' survey
- three focus groups for students
- two focus groups for managers
- IEPs (Individual Education Plans) for students
- a pre-post reading assessment for students
- informal exit interviews

The data from these sources indicate that, overall, the Bull ESL program achieved most of its goals at least partially. (See Goals Matrix, pages 19-22.) The program was poised to expand significantly when, unexpectedly, business conditions required a major reorganization of shifts and work schedules. As of this writing, the ESL program has only a few associates enrolled.

Phase I: Initial preparations

Program coordinator David Rosen introduced team-based evaluation to the PET before he invited researcher Laura Sperazi (who was to serve as facilitator at the site) to talk with the group. He was better prepared to make such an introduction than other coordinators might be because he had worked with the researcher on a prior team-based evaluation project.

In addition, Ms. Sperazi (hereafter referred to as "the facilitator") prepared for working with the team by taking several tours of the plant and discussing issues related to the ESL program with the Training Director, the Engineering and Training Intern, the teachers, Curriculum Developer and Program Coordinator. The facilitator also wrote a letter to the Training Director and the Training Intern which explained the history and purpose of team-based evaluation. She then prepared materials for team members which outlined the steps of the evaluation process and a possible timeline.

Phase II: Planning the evaluation

It took roughly six months for the team to plan its evaluation. During that time it (1) revised its program goals several times; (2) clarified the differences between evaluation and assessment; (3) grappled with the fact that it had not collected base-line data of any kind other than a series of "placement" assessments in reading, writing and listening; and (4) tried to reach consensus on what the focus of the evaluation should be.

Before it settled on a focus and data collection methods, the team also fortified itself in two additional ways:

First, selected team members met with members of two other PETs (from the Haartz Corporation and the Norton Company) to share ideas about how to focus an evaluation of a workplace education program.

Second, anticipating the need to present the results of their evaluation in statistical form, selected members participated in a day-long training on the use of the Statistical Package for the Social Sciences (SPSS), a database program. (Steven Andrews and Alice Oberfield Andrews conducted the training and were available for telephone consultation afterwards.) Although some of the SPSS training focused on actual manipulation of the database, much of it focused on how statistical analysis is only as good as the information collected. This further stimulated the team to think through the focus of their evaluation -- a question which team members had much on their minds as they entered the training. In the end, the team chose not to use SPSS for data analysis. The data which the team collected did not warrant such analysis. There was some discussion about additional training for Bull support staff in the use of the database so that it could be used in the future, when the data warranted it.

Clarifying program goals and the information to look for

The program goals which the team finally agreed on for the purposes of the evaluation are presented in the Goals Matrix on pages 19-22, along with an assessment of whether they were achieved or not.

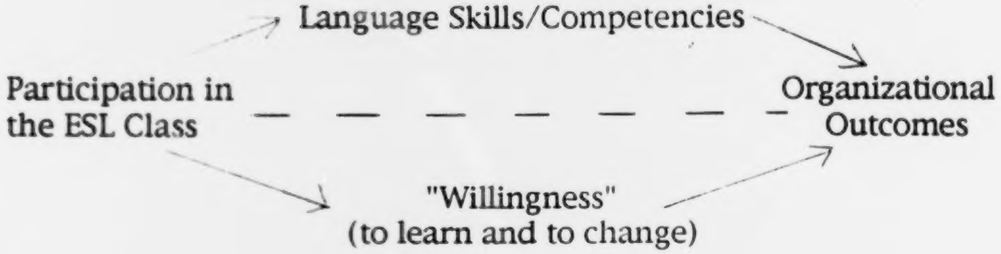
Questions about the kind of information the team needed to collect about the ESL program in the short and long term are best summarized by the events of the SPSS training.

Jane La Branche, the Training Director, came to the SPSS training with questions about the evaluation's direction to date. Basically, she said that at this point in the development of the program (five months), it was unfair to measure the success of the program by how well it meets long-term organizational needs. She said that, at this time, the heart of the evaluation needs to be on measuring and documenting the improvement of participants' language skills. What level of language skills are needed to help bridge associates to other training? How fast can the company expect associates to approach this level of skill? Are associates progressing?

At some point, she said, it would be appropriate to determine if the program is having an effect on the organization. She said that the team should think about these issues now, in order to be well-prepared to evaluate them down the road. For now, however, the focus of the evaluation should be on improvement of language skills. What the team learns about improving language skills should be used, in turn, to improve the program.

Jane's comments got everyone thinking again about the kind of evidence it is important to gather both to help Jane argue effectively with management for continued support of the ESL program and to improve the program. In fact, the team shared a tacit assumption that the evaluation should expose opportunities to improve the program -- as opposed to determine whether the program should continue or not. (Some team members later said that they felt artificially driven by grant requirements to evaluate program and student outcomes when, at this early stage of program development, outcomes were not their main concern.)

The conceptual model that the team agreed they were working from looks like this:


Language Skills/Competencies
Participation in the ESL Class
Organizational Outcomes
"Willingness" (to learn and to change)

This model assumes a connection between acquisition of language skills and competencies and organizational outcomes. It also assumes a connection between "willingness" to learn and to change and organizational outcomes. "Willingness" was intended to describe those personal, affective changes which occur when people enjoy learning and which affect organizational outcomes in the long term. The group decided not to try to measure "willingness" at this point. Rather, it would focus on improvement of language skills and competencies.

The team made the following suggestions about the focus of the evaluation at this time:

(1) **Revisit the Placement Assessment (which Annie Yu, one of the teachers, designed and which all program participants have taken) as a pre-test which can be given again as a post test, and which can be scored in a way to demonstrate individual progress over time.** The point here is that there is a system already in place that can be built on to provide more complete pre- and post information on all students than is currently available.

The SPSS trainers had some specific suggestions for designing the post test based on the placement instrument. [2]

---

[2] These suggestions included the following and were based on designing post-tests for reading, listening, speaking and writing: (a) Score each part of the test so that the final score is more than one number; (b) It may be useful to score the final test as one number as well, and that number can be a range from, for example, 1 to 3. This means that if an associate scores a 4, s/he is ready to "bridge" out of ESL to another training. The point here is that it is necessary to

(2) Design a pre/post test using the most important competencies that Jim Ward, the Curriculum Developer, is already in the process of identifying. Again, the point is that there is a system about to be put into place that can be built on to provide more complete pre- and post- information on all students than is currently available. There seemed to be agreement in the training that this would be a logical -- and fairly easy -- thing to do.

(3) Assess model associates to determine their level of skill as a standard for participants in the ESL program to reach toward. Jane had expressed interest in knowing what level of language is sufficient for workers to participate in other training programs. The SPSS consultants described this task as "definitional." The strategy suggested to define -- even in broad terms -- the level of skills necessary to perform well was: assess model workers with the same or similar assessments used with ESL program participants. This will give the staff and Jane a good idea of what the program should be working toward.

(4) Include a student self-report as part of assessment of progress. Team members agreed that students' reports of their own learning are an important part of a complete evaluation. Mel Green, a teacher, has begun collecting students' self reports in class, with a particular focus on how to improve the program. The team members present at the training suggested that the student self report might be part of the IEP.

(5) Gather systematic supervisor feedback on the effects of the program on work. Although much of the training focused on measuring progress from the teacher's perspective, some time was spent thinking through the value of getting supervisors' perceptions of how class learning is translating into changes in behaviors at work. A simple survey could be the first link in the evaluation system which ties to organizational effects.

---

identify when associates have developed their skills enough that they are ready to leave ESL and move on to something else ; (c) Eliminate the choice of stories to read in the post test. Standardize the stories used in the post test to match the levels of the stories used in the pre-test.

Even a small survey could provide data over time which would supplement the more skills-based data, and provide Jane with stronger arguments for continued company support of the program. Jane said that this type of survey would not provide sufficient evidence of program success on its own, but would be meaningful when combined with other data. Team members present at the training also discussed the possibility of surveying other people like associates not enrolled in the program or other managers. These people would simply provide additional information on the extent of associates' improvement in English; they would not constitute a control group.

At this point in the evaluation it was important for the team to make choices about next steps in light of the resources available. How much time and creative energy are needed to move forward on each of the recommendations/actions outlined above? What are the team's priorities?

The team reviewed another set of materials before it made final decisions about where and how to focus its evaluation. These materials are the seventeen quality indicators for workplace basic skills programs which were developed by the Massachusetts Workplace Education Initiative. The indicators (Appendix A) identify and set standards for the essential components of a quality basic skills program.

When the team reviewed these indicators in March, members felt that it would be overwhelming to entertain all seventeen indicators. They agreed that the team should set aside a whole day to review the indicators and assess the program against them. (The team did this in late August.) Members agreed that, for the present, the evaluation should consider one indicator -- the extent to which the program is providing a quality learning environment for the associates.

Designing a strategy for gathering data

The overall strategy which the team developed for gathering data was:

(1) The team discussed the issues until it clarified the kinds of information it wanted to collect (as described above).
(2) With additional input from the team as needed, the evaluation facilitator developed a draft instrument to collect the desired information.
(3) The team would then review and revise the instrument.

Often the process of revision took place in three or four phases. The team would review what the evaluator had done; the evaluator would then revise the draft and submit it for review again.

In the late spring team members agreed on a strategy for gathering the data it wanted. There were still differences among team members about whether it was desirable to assess decontextualized communication skills (reading, listening, speaking, and writing as stand-alone phenomena) but it seemed fair to try to develop a way of assessing improvement in writing skills (using the placement assessment as a base-line) as one part of the evaluation. (Possible use of the BEST was discarded after consulting with experts about the limited value of available standardized tests.)

Student and manager surveys and focus groups would allow the team to gather information both on the perceived quality and appropriateness of the learning environment being provided and the changes in students' work and personal lives which result from participation in a company-sponsored ESL course. The team also agreed to continue specifying competencies for the IEP for teachers in subsequent classes. These competencies would include both work-specific and general communication competencies. The team also suggested at this time that formal exit interviews of key staff and students be conducted by the evaluation facilitator. (The facilitator was able to conduct only informal interviews at the end of the project. See Goals Matrix. on pages 19-22.)

There was one more resource available to the Bull team for input on how to think about evidence, measurement, and instrument design in general, and how to develop a post-test based on the placement assessment. That resource was Donald Cichon of Donald Cichon Consultants. The team had been coming to the conclusion that it would not be possible to create a meaningful post-test given the lack of quantifiable base-line data in reading, speaking or listening but that it might be possible to do something meaningful with writing. He met with the team and made suggestions about how to design and score a writing post-test.

Phase III: Gathering, organizing, analyzing, and reporting the information

Gathering and organizing the data

The Curriculum Developer, and later the Training Intern, along with the evaluation facilitator were responsible for carrying out the data-gathering activities. For example, the Curriculum Developer oversaw the administration of the student survey as a class activity in all three classes and distributed the managers' survey to the appropriate managers. The Training Intern conducted background interviews for the student survey and the first supervisor focus group. The evaluation facilitator conducted three student focus groups and one supervisor focus group.

Once the data were gathered, the Curriculum Developer, Training Intern, and evaluation facilitator were also responsible for organizing the data. For example, the Curriculum Developer provided a simple tally of the frequencies of responses to the student survey. The Training Intern provided a simple tally of the frequencies of responses to the student background survey and organized a summary of the discussion points of the first supervisor focus group. The evaluation facilitator organized a summary of the discussion points of the three student focus groups and the second supervisor focus group.

Analyzing the data

Once the data were organized, the facilitator offered an analysis of the data to the team and the team would discuss that analysis -- always enriching the analysis in ways that only staff "inside" an organization can.

For each of the six data-gathering activities which the team undertook, and which are outlined below, are additional information on the type of data gathered, its organization, and the team's analyses.

Student Questionnaire

The purpose of the student questionnaire was two-fold: to assess the extent to which the students believed the program was providing a quality learning environment, and to assess self-perceptions of change in communication skills at work and in life outside of work.

In early March, the Training Intern conducted informal interviews with ten students in order to gather information with which to develop survey items. This information focused on identifying the standards of a quality learning environment from the students' perspective. (See Appendix B.) After the team developed the student questionnaire, the Curriculum Developer piloted a draft of the questionnaire with two students who were also members of the PET to ensure reliability and validity of the instrument. (See Appendix C.)

Twenty of the twenty-eight students enrolled at the time completed the survey. The Curriculum Developer organized the raw scores so that the facilitator could easily interpret them. (See Appendix D.)

Students assessed the quality of their program overall as very high but did not assess their changes in communication skills very high. Two issues emerged that generated particular interest and curiosity within the team: (1) students appeared to say that the curriculum focused too much on work-related issue, and (2) in a program that they praised so highly, students self-reported relatively little change in their communication skills. These issues were followed up on and clarified in focus groups.

Student Focus Groups

The student survey was followed by three student focus groups -- one for each ESL class. The facilitator conducted these groups with support from a new ESL teacher during three class periods.[3] (See Appendix E.) The focus groups clarified the two issues identified above and provided important information about the students' feelings about computerized instruction.

First, the students did not think that the curriculum focused too much on work-related issues. They found the question on this topic in the questionnaire confusing and did not answer it to reflect their intent. The focus group clarified that students understand very well the importance of a work-related curriculum. They understand that the future of the company depends on how flexibly they can perform their jobs, which depends on how well they can communicate in English.

Second, the students were very harsh in their assessments of their improvements in communication skills because they do not feel that they can speak at the level at which they want to speak. They are impatient to achieve their life-long communication goals. They want more instruction in speaking skills. They want to be able to practice their English with a proficient English speaker, not another non-native speaker of English who cannot speak English well.

Third, students looked favorably on computer-assisted instruction but did not want it to replace real conversation with a teacher.

---

[3] The evaluation facilitator conducted the student focus groups on the first day of class with the new ESL teacher. The focus groups proved to be a wonderful introduction to both the students and program for the new teacher. However, had the teacher been teaching the class -- even for a short period of time -- her presence would have compromised the focus group process. The students needed to feel that they could speak freely and honestly about their program. This would have been difficult or impossible with a well-known teacher in the group.

Managers' Survey

A total of four supervisors completed the managers' survey. It was distributed by the Curriculum Developer and results were tallied by the facilitator. The survey contained twenty items for which the supervisor was asked to assess change in each associate under his/her supervision from the year prior to ESL class (1992) to the current year (1993). The four supervisors completed a total of fifteen surveys. There was a total of twenty-eight associates enrolled in the ESL program so thirteen associates are not represented. (See Appendix F.)

Of primary interest was whether the supervisors witnessed any change and, if so, on which items. The results are striking. Most supervisors report very little change:

- For three associates, supervisors report no change at all.
- For two associates, supervisors report change on only one item.
- For another two associates, supervisors report change on three items.
- For four associates, supervisors report change on six items.
- For one associate, a supervisor reports change on nine items.
- For one associate, a supervisor reports change on thirteen items.
- For one associate, a supervisor reports change on fourteen items.
- For one associate, a supervisor reports change on seventeen items.

The obvious question was why the supervisors noted so little change. Was this a reflection of the poor quality of the ESL program? Or were there other factors at work that deserve attention? For example, do the supervisors have enough contact with the associates to be able to make an observation about change in communication skills? And do the associates have the opportunity to apply all the skills they acquire in the classroom to their work on the floor? The managers' focus groups attempted to answer these questions.

Managers' Focus Groups

There were two focus groups with managers (also referred to as supervisors). In addition to providing an opportunity to gather information from the supervisors, the focus groups were also seen as an opportunity to educate management about the ESL and basic skills program and to enlist their greater support of and involvement in it. (See Appendix G.)

Three supervisors attended the first group (which was facilitated by the Training Director) and four attended the second (which was facilitated by the evaluation facilitator). In general, supervisors corroborated the results of the survey. They did not see much change in the associates who were enrolled in the ESL program. The reasons for this are varied.

First, supervisors do not have a lot of one-on-one contact with associates in the course of a week and do not have the opportunity to assess the kind or quality of change in communication skills that is taking place. Second, as a rule, people whose first language is not English tend not speak in English at work. Even if their English language skills are improving, the culture of the floor does not encourage associates to speak in English. The opportunity to witness any change is thereby diminished further. Supervisors stressed that all the associates are "good performers" and that "good performance is not the issue."

At the same time, it was easy to see some dramatic changes in the few associates who do "interface" with supervisors and engineers and who are exceptionally motivated.

Supervisors agreed strongly that there was a need for more communication in English on the floor. The management focus is on developing a self-managed workforce. There was consensus that the company is still "light years away" from having a self-managed work force and that making English the common language of work on the floor is essential. Supervisors agreed that the ESL class should stress self-initiated conversation in English. Supervisors expect that the ESL staff will stress the importance of speaking in English for interpersonal communication and for work. Supervisors underscored that it is a false expectation that people will speak English on their own when it is not their first language.

Structures must be in place to encourage and support them both in the ESL program and on the floor.

With hindsight, the results of these focus groups highlight how critical it is to clarify supervisors' expectations for what a workplace education program will achieve when the program starts. Program staff can educate supervisors about realistic expectations; but, often, program staff also need to learn what these expectations are themselves -- as was the case at Bull.

Supervisors also made the following points:

- Supervisors should become part of the IEP process. Supervisors agreed that being part of the IEP process was a good idea. It gives a supervisor a good basis for evaluating what a person can accomplish. There was a lot of discussion about how associates' personal goals should also be integrated into the IEP and shared with the supervisor -- so the supervisor can support the associate in achieving those personal goals. There was also agreement that the associate should feel at the center of the process -- making choices about what to share, what to commit to, etc.

- The curriculum should take a broad view of what is "work-related." The ESL program can support supervisors and the company's overall well-being by bringing issues of "quality, cost, and delivery" into the classroom and curriculum. The program should emphasize that "people are responsible for their past, present, and future," not to "get people nervous," but to show that "the company needs 100% support." The program should give specific examples of why it is important to develop a certain skill. The focus of the curriculum should be: what facilitates team-based work? There should be discussions about what a self-managed team is, and the problems that associates anticipate they will encounter in this new mode of work.

- Diversity issues should be addressed in the curriculum. The question is: How does the message that you can't do something get conveyed to associates, and what role does cultural diversity (racism, prejudice, ignorance) play in the sending and receiving of that message? In addition, diversity issues keep the students engaged. Since it is true that the ESL curriculum "can't do everything," diversity training is something that the company might offer as a refresher course in diversity issues for everyone, and then the ESL curriculum can support it.

- Regular focus groups: Supervisors agreed that it would be good to have a half-hour focus group between supervisors and ESL staff every six to eight weeks to keep up with the program.

Writing Assessment

The results of the writing post test demonstrate that associates made progress in writing during their enrollment in the ESL program.

Individual Education Plans

In order to ensure that the competencies in the IEPs are the competencies which management believes to be the most important, the Curriculum Developer surveyed supervisors and asked them to rate the priority (high priority, priority, low priority) of fifty items which might be incorporated into the IEPs. (See Appendix H.)

The IEPs for the grant period demonstrate that associates achieved the desired competencies in the ESL program. See Goals Matrix, below.

The Goals Evaluation Matrix

The following Goals Evaluation Matrix presents the program goals along with the data-collection procedures used to collect information related to those goals. On the basis of the information collected from the sources just described, an assessment is made about whether the goals were achieved or not and, if they were achieved, to what extent were they achieved. An asterisk indicates that the assessment needs some explanation. The explanation is provided at the end of the Matrix.

Bull Workplace Education Program
Goals Evaluation Matrix

• = This goal was evaluated
A = This goal was achieved, as indicated by the related measure
AP = This goal was achieved partially, as indicated by the related measure
NA = This goal was not achieved
* = See notes at end of Matrix

GOALS	INSTRUMENTS/PROCEDURES FOR DOCUMENTING AND MEASURING GOALS STUDENT SURVEY	MANAGERS SURVEY	STUDENT/MANAGER FOCUS GRPS	WRITING PRE/POST TEST	IEPs	INFORMAL EXIT INTERVIEWS
1. Provide appropriate learning arrangements to associates in the program.	•A	• A				
2. Identify and enable associates to acquire oral communication (listening and speaking), reading, writing, and math skills needed to participate in self-managed work teams, collaborate in data collection, and conduct themselves productively in meetings. * 1	• AP	• AP	• AP	• AP	• AP	• AP
3. Enable associates to be ready to participate in Bull's standard computer training course through: a. helping associates acquire necessary listening and speaking skills, and basic knowledge of what computers can do, and	• A				• A	
b. providing suggestions to computer training course instructors on how they can help limited English speaking students who enroll in their course to succeed.						
4 Identify and help associates acquire listening, speaking and writing skills needed to participate in other Bull training courses and in on-the-job training				• AP	• AP	

INSTRUMENTS/PROCEDURES FOR DOCUMENTING AND MEASURING GOALS

GOALS	STUDENT SURVEY	MANAGERS SURVEY	STUDENT/MANAGER FOCUS GRPS	WRITING PRE/POST TEST	IEP.	INFORMAL EXIT INTERVIEWS
5. Enable associates to read, write and interpret documentation needed for daily work (e.g. S.O.D.'s, blueprints, etc.) a. as indicated in ISO 9000 guidelines	• AP	• AP	• AP		• AP	
b. for safety (e.g. Right to Know Law, reading M.S.D.S. and safety signs)						
c. for quality						
d. to understand company policies and company communications						
6. Help associates acquire listening, speaking, reading and writing skills needed to participate in the Performance Appraisal Management Process a. interviewing						
b. reading and understanding performance appraisal forms						
c. assessing their goals					• AP	
d. negotiation skills						
e. peer assessment skills (listening and speaking skills needed for communication with one's "internal customers")						
7. Classroom activities should model the behaviors that management and employees at Bull are trying to achieve in the organization (i.e. teamwork, open communications, etc.)						
8. To enable associates to achieve their personal learning goals, related or not to the workplace. *2	• AP		• AP		• AP	

INSTRUMENTS/PROCEDURES FOR DOCUMENTING AND MEASURING GOALS

GOALS	STUDENT SURVEY	MANAGERS SURVEY	STUDENT/ MANAGER FOCUS GROUPS	WRITING PRE/POST TEST	IEPS	INFORMAL EXIT INTERVIEWS
9. To enable participants to achieve their learning goals as stated in their Individual Education Plans through the application of a competency-based curriculum. We expect 80% or more of the participants to attain 80% of the competencies outlined in their Individual Education Plans within the grant period.					• A*3	
10. Furthermore the program will: a. establish itself as a program that will continue and develop beyond the period of grant funding						• A
b. establish, maintain and improve a basic skills needs assessment						• AP
c. establish an ongoing planning and evaluation team						• A
d. take full advantage of Bull's computer lab by offering computer-assisted basic skills instruction						• A
e. foster in all employees a mindset of lifelong learning, continuous learning	• AP		• AP		• AP	
11. The program will build a strong education and training partnership between Bull, Roxbury Community College, and the community-based education programs supported by Roxbury Community College's Adult Literacy Resource Institute						• NA

21

	INSTRUMENTS/PROCEDURES FOR DOCUMENTING AND MEASURING GOALS					
GOALS	STUDENT SURVEY	MANAGERS SURVEY	STUDENT/ MANAGER FOCUS GRPS	WRITING PRE/POST TEST	ICP.	INFORMAL EXIT INTERVIEWS
11. continued a. To develop a referral relationship with the Jackson Mann Community Center's adult learning program and with Roxbury Community College's Division of Continuing Education and Community Services ESL programs, to serve associates who have earning needs beyond the current capacity of the program, or associates who want to meet their learning needs outside of the work environment.						• NA
b. To develop a long-term referral relationship, and possibly continued worksite programs with the previously named centers for associates who may need continuing education (GED or External Diploma Programs) *4						• AP

Notes on the Matrix

The following notes summarize the comments of the members of the planning and evaluation team who worked most intensively on the evaluation, and who reviewed the goals matrix after the evaluation was concluded.

*1. This goal is too big and therefore difficult to assess. The skills should be broken out so that listening, speaking, reading, writing and math are evaluated separately.

*2. If this goal had been phrased "work toward their goals" instead of "to achieve their goals," it would have been fully achieved. It was impossible for most associates to achieve their goals in a ten-month period because their goals were very ambitious and would take years to achieve. However, all of them did work toward their goals with success.

*3. The team does not have full confidence in this measure. The teachers -- who rated the IEPs -- were fastidious in their record keeping and can subjectively substantiate their assessments of students' progress. But they were, in fact, developing the IEP process as the grant year progressed. This means that they did not have a fully developed process in place at the beginning of the program which they followed, with base-line data against which they made an objective assessment of achievement of competencies. At the end of the grant year they did have a process in place that they felt very confident about and which subsequently-hired teachers are now using. After the evaluation was completed, two members of the Planning and Evaluation Team commented that this might be a reasonable way for a new program to proceed.

*4. Educational services were expanded internally -- not in relationship with community agencies -- to include ABE and GED.

Preparing a strategy for reporting the findings

At the time that the evaluation was conducted, the evaluation team was the primary audience for the results of the evaluation. Members understood that the evaluation system was just getting worked out. They felt that they could use their preliminary findings internally to develop the program. However, there was an understanding that, eventually, evaluation results could be used to argue for program continuation and expansion. The team wanted to first critically review the information being gathered, and their interpretations of it, before they reported results with any confidence to management or other audiences.

Within the team itself, members communicated what they were learning from data-gathering activities in both written and oral formats. The facilitator took primary responsibility for summarizing the results of particular data-gathering activities for other members to consider.

For the team's external audiences, the Curriculum Developer authored a program "Annual Report" which drew on the team's findings.

Phase IV: Deciding what happens next

Taking follow-up action

Based not only on the results of the evaluation but on the integrated planning and evaluation process in which the team had engaged all year, with the support of management, the team decided to:

(1) Expand the program to include native English speakers at the pre-GED and GED levels.

(2) Integrate a computer-assisted instructional program purchased from Josten's Learning Systems into the newly expanded program.

(3) Involve supervisors more intimately in the development of IEPs so that the IEPs better reflect the students' work-related needs, and the supervisors better understand the students' non-work-related goals.

(4) "Sell" the education program to supervisors and students as part of the company's strategy for organizational change -- a change which everyone understands is partly underway and whose pace will accelerate.

As mentioned earlier, although the Jostens system has been installed, enrollment in the program is very low. Intensely demanding production schedules have superceded the implementation of an expanded education program.

Evaluating the evaluation

Team members and the facilitator commented that there are two directions which the evaluation might have taken that would have strengthened it. These are:

- The team could have started its process of identifying goals by referencing the goals of the program as written in the grant proposal. While some of those goals were included in the revised goals list, it still took six months to complete the new list and begin to collect data. If the team had begun their work with the goals they had in hand, they could have still continued to refine goals and also begun to collect information.

- At the same time, some team members regretted having been too driven by the outcomes of the grant proposal -- outcomes that are more-realistically addressed in the third -- not the first -- year of a program.

- Earlier data collection would have been useful. The evaluation facilitator could have directed the goal-setting process more firmly and guided earlier data collection. Earlier data collection would have given team members an immediate feel for how formative evaluation can assist program development -- something that they could have built on during the year.

- It would have been useful to have deeper discussions early on about the differences between assessment and evaluation, and about what team members wanted to learn from an evaluation. In retrospect, team members had different expectations about what they wanted an evaluation to demonstrate about their program. For example, the Training Director was clear about wanting evidence of improvement in reading, writing, and speaking against a base-line measure. The two teachers in the program were unconcerned with base-line measures and felt that student self reports and teachers' observations were adequate methods for documenting progress.

The goal-setting process only partially elucidated these differences. But these differences would nonetheless surface in the ways that teachers, other education staff and managers discussed evaluation goals and projected activities. The evaluation would have been stronger if those differences had been explored more fully early in the evaluation process, and proactively rather than reactively.

- Team members agreed that the presence of an evaluation facilitator probably kept a firmer focus on evaluation activities than had they worked entirely on their own. However, team members (especially the Director of Training) were confident that the team would have evaluated on their own. After this pilot year, they are confident that they have some evaluation processes in place on which they can build.

IV. REFLECTIONS

Facilitator Laura Sperazi"s comments:

- Overall, team-based evaluation worked well in this company. Bull employees are accustomed to working in teams so the evaluation team format was familiar. At the same time, their familiarity with teamwork required the facilitator to sit back and let the team govern the process in a way that was more synonymous with their culture and language than was her prepared outline of evaluation activities.

- The facilitator conducted more of the actual evaluation work than anticipated. Doing the work justified her presence on the team and also allowed her to model some "evaluation behaviors" that some team members learned from.

- This team would have conducted some type of evaluation without the facilitator. The Program Coordinator is very knowledgeable about evaluation and would have required that some evaluation activities be carried out. The company culture also values (even demands) evidence of effectiveness of training programs. The Training Director would have required that some evaluation activities be carried out. Without the facilitator, this team would have been a good audience for a Guide on team-based evaluation of workplace basic skills programs.

- Waiting to collect data until the goals were completely defined made the activity seem more momentous than it should be. Early data collection helps the team to be unattached to the data. Some of it might be good; some not so good. Waiting until all conditions are (relatively) "perfect" or complete puts more pressure on the data-collection process than is necessary.

- It is important to note that several times during the course of the evaluation, and again at the last meeting where some members of the evaluation team gave the facilitator feedback, the following perspective on developing and evaluating a new workplace basic skills program was articulated:

> It takes the experience of developing and attempting to evaluate a program over the course of a year to know what it is that the program might accomplish and how it might best be evaluated. While there is a lot of pressure on the program to know what it can accomplish at the beginning, in reality, in this new field of workplace education which has no set curricula and established evaluation tools, it takes a full cycle of course development and evaluation to work out clear goals and evaluable indicators and to design appropriate evaluation procedures.

Therefore, the "failure" to produce a complete evaluation system at the start of a new program is really not a failure. It is a function of the state of the art of program development. Spending the better part of the year openly learning what the program can do and how it might be evaluated best may well ensure the subsequent success of the program. Similarly, holding up the start of a program until all base-line measures -- and all other programmatic bells and whistles -- are in place may be not only unrealistic but also not in the best interest of the students or the company.

BULL WORLDWIDE : Appendix A

Workplace Education Evaluation

Quality Indicators of Program Process
"What do you need to have in place in your program in order to achieve your goals?"

The information in the chart below stems from past evaluations of workplace education programs in the Massachusetts Workplace Education Initiative and the SABES Checklist of Indicators of Program Quality. As the information is removed from its context for the purpose of giving an overview, it is key to analyze it critically in order to determine whether or not it may apply to your program.

By *processes* we mean all the components of a program that have been developed or put into place to achieve the goals and objectives. Processes are the answers to the question: What have we done or established in order to achieve our goals ?

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Articulate Philosophy of Program	clear mission statement, goals, and approach/educational philosophy
Develop and Implement Outreach and Recruitment Plan	plan for active recruitment in company with strategies and materials appropriate to linguistic and ethnic diversityof workplace; clear statements of what program does and doesn't do
Provide Orientation	activities to orient potential participants, supervisors, and other company personnel to program
Establish Intake Procedures	appropriate assessment and goal setting with learners; referral system that links learner through program with (more) appropriate training or education opportunities

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Design and Implement Initial Assessment Activities	assessment of skills related to learner goals; assessment related to curriculum; assessment is non-threatening and confidential; assessment is at convenient times and policies are in place that facilitate participation; bilingual assistance is available if needed; assessment results in Individual Education Plan; mechanism in place to share results with learners and teachers; assessment results inform placement, curriculum development, instruction; assessment results inform referral and identify need for support services;...
Develop Curriculum	curriculum development process is documented/can be articulated by partners involved; curriculum development draws on learner need, ability, and interest; curriculum is contextualized; ...
Select Appropriate Learning Arrangements (e.g. group instruction, computer-assisted learning, etc.)	selection of learning arrangement is based on partnership need, preferences, and resources; content is based on learner goals, interests, and needs; methods, activities, and materials are appropriate for adults and reflect the workplace; classes are scheduled at times that all interested participants can attend; ...
Develop On-Going Assessment Procedures	documents learner progress toward their goals; takes place between learner and teacher; is based on clear benchmarks;...
Ensure Support Services	program provides necessary support services (e.g. counseling, transportation, childcare, bilingual assistance etc.) or links learner through program with support services in community;

Curr. + instruction. model behavior Students need to learn which the organization desires.

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Staffing	clear job descriptions; staff selection reflects communities of participants; adequate supervision and evaluation; clear policies; opportunities for growth; ...
Staff Training and Development	pre-service orientation for staff; opportunities for staff to attend staff development activities; ...
Program Planning, Evaluation, Monitoring, and Management	has an active Planning and Evaluation Team; holds regular Planning and Evaluation Team meetings; has a program development/implementation plan; has mechanisms to solicit learner, supervisor, manager, and labor input; has an orientation for team members; has clearly defined roles, responsibilities, and decision-making processes; has documented interagency agreements; has links with other programs; has clear policies for attendance, release time, etc.; has on-going and participatory evaluation process that uses both qualitative and quantitative data to look at learner progress, program components, and organizational changes; ...
Tracking/Reporting	has ways to document learner progress; tracks workplace demographics, applications, enrollments, attendance, outcomes, and waiting lists; ...
Fiscal Management	tracks budget by funding source (e.g. release time); has accurate record systems; prepares and submits reports in a timely fashion; ...
Facilities	has adequate furnishings and space; has sufficient supplies; is handicapped accessible; is clean, well-lit, and ventilated; has photocopier, typewriter, or PC; ...

A3

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Follow-Up/Exit	has ways to support learners in next steps; has established links between program and further education and training; has system to contact learners after they complete/exit the program to determine reason for withdrawal and/or to track learner progress; ...
Other QUALITY OF BUSINESS/EDUCATION PARTNERSHIP	has common language; meets regularly; ...

Bull Worldwide Appendix B

Sharon Parmalee 3/28/93
ESL Student Survey -- for developing a tool to assess ESL classes

1. Characterize an ideal classroom at Bull

2. Characterize a bad classroom at Bull

3. Characterize a good ESL teacher
   a. What would s/he be doing?
   b. What would s/he be thinking?
   c. What would s/he be feeling?

4. 3. Characterize a bad ESL teacher
   a. What would s/he be doing?
   b. What would s/he be thinking?
   c. What would s/he be feeling?

5. Characterize an ideal ESL class at Bull
   a. What would sbe happening?
   b. What would people be doing?
   c. What would people be thinking?
   d. What would people be feeling?

6. Characterize a bad ESL class at Bull
   a. What would sbe happening?
   b. What would people be doing?
   c. What would people be thinking?
   d. What would people be feeling?

B1

Bull Worldwide: Appendix C

Bull ESL Program
Student Survey June 1993

Code #____

Instructions:

We want to know what you think about your ESL class. We will use your answers to improve the program next year. Please draw a circle around the answer that is closest to the way you feel.

Your answers are confidential.

1. The class helps me communicate on my job better.

always   usually   sometimes   never

2. I have enough time in class to learn and make progress.

always   usually   sometimes   never

3. Class is hard for me.

always   usually   sometimes   never

4. Class is easy for me.

always   usually   sometimes   never

5. There are too many lessons about our work.

always   usually   sometimes   never

6. The books, worksheets, and other handouts the teacher gives us are interesting.

always   usually   sometimes   never

7. The books, worksheets, and other handouts the teacher gives us are hard for me.

always   usually   sometimes   never

8. The books, worksheets, and other handouts the teacher gives us are easier than I like.

always usually sometimes never

9. These are questions about your teacher. Answer them the same way you answered the previous questions. The only difference is that these questions do not have numbers next to them.

My teacher:

- talks more than I like.

always usually sometimes never

- gives me a chance to talk in class.

always usually sometimes never

- encourages me to ask questions.

always usually sometimes never

- cares that I am learning.

always usually sometimes never

- helps me when I don't understand.

always usually sometimes never

- gives more homework than I like.

always usually sometimes never

- gives less homework.than I like.

always usually sometimes never

- speaks too fast for me.

always usually sometimes never

- speaks clearly.

always usually sometimes never

- uses words I understand.

always usually sometimes never

- treats me as an adult.

always usually sometimes never

10. I feel comfortable telling the teacher I don't understand.

always usually sometimes never

11. Please draw a circle around NOT MORE THAN FIVE things that you would like to have more of in your class.

- **I'd like more:**

-- exercise books
-- dictionaries
-- job-related materials
-- stories
-- newspaper articles
-- math
-- listening exercises
-- speaking
-- reading
-- writing

-- Is there anything else you would like more of ?____________________
____
____

12. These are questions about your class.

My class:

- makes me want to continue learning.

always usually sometimes never

- helps me when I'm not at work.

always usually sometimes never

- helps me feel more confident.

always usually sometimes never

- helps me to achieve my personal goals.

always usually sometimes never

13. These are questions about using your English skills ***at work.***

- **LAST YEAR**, before I started class, I **READ AND UNDERSTOOD** work documents (for example, S.O.D. s, M.S.D.S.s, blueprints, company policy.)

always usually sometimes never

- **LAST YEAR**, before I started class, I **SPOKE** English at work (for example, to co-workers, to supervisors.)

always usually sometimes never

- **LAST YEAR**, before I started class, I **WROTE** at work (for example, memos and notes.)

always usually sometimes never

- **LAST YEAR**, before I started class, **I UNDERSTOOD** what people at work said to me in English (for example, at department meetings, in my work area, at business meetings.)

always usually sometimes never

- **NOW I READ AND UNDERSTAND** work documents (for example, S.O.D. s, M.S.D.S.s, blueprints, company policy.)

always usually sometimes never

- **NOW I SPEAK** English at work (for example, to co workers, to supervisors.)

always usually sometimes never

- **NOW I WRITE** in English at work (for example, memos and notes.)

always usually sometimes never

- **NOW I UNDERSTAND** what people at work say to me in English (for example, at department meetings, in my work area, at business meetings.)

always usually sometimes never

14. These are questions about using your English skills ***when you are* not *at work.***

- **LAST YEAR**, before I started class, **I UNDERSTOOD WHAT I READ** in English (for example, newspapers, books, instructions, children's school reports, medical and other forms)

always usually sometimes never

- **LAST YEAR**, before I started class, **I SPOKE** in English (for example, to doctors, store clerks, neighbors.)

always usually sometimes never

• **LAST YEAR**, before I started class, I **WROTE** in English (for example, medical and other forms, notes to my children's school.)

always usually sometimes never

• **LAST YEAR,** before I started class, I **UNDERSTOOD** what people said to me in English (for example, doctors, nurses, store clerks, children's teachers, neighbors.)

always usually sometimes never

• **NOW I UNDERSTAND WHAT I READ** in English (for example, newspapers, books, instructions, children's school reports, medical and other forms)

always usually sometimes never

• **NOW I SPEAK** in English (for example, to doctors, store clerks, neighbors.)

always usually sometimes never

• **NOW I WRITE** in English (for example, medical and other forms, notes to my children's school.)

always usually sometimes never

• **NOW I UNDERSTAND** what people say to me in English (for example, doctors, nurses, store clerks, children's teachers, neighbors.)

always usually sometimes never

15. Please think about whether your English skills have changed since you started class, and circle the answer that is true for you.

• **NOW I UNDERSTAND WHAT I READ** in English.

a lot better better no change worse

• **NOW I SPEAK** English.

a lot better better no change worse

- **NOW I WRITE** in English

a lot better   better   no change   worse

- **NOW I UNDERSTAND** spoken English.

a lot better   better   no change   worse

16. Is there anything else you would like to say about your ESL class?________

____

____

____

____

17. Do you plan to continue your class?

-- Yes   -- No

If yes, why? Please draw a circle around all that are true for you.

-- It helps me to talk with my manager
-- I want to get into a Bull training program
-- I enjoy learning
-- I need it for my job
-- I want to go to college
-- Other____
____

If no, why not? Please draw a circle around all that are true for you.

-- It is too demanding
-- I don't like school
-- I'm too tired at the end of my shift
-- I have too many things on my mind
-- Other____
____

Bull Worldwide: Appendix D

Tabulation Bull Student Survey, Spring 1993

N = 20

Q.1-8	Always	Usually	Sometimes	Never
Q.1	8	9	3	0
Q.2	4	9	3	2
Q.3	0	1	15	8
Q.4	0	5	13	2
Q.5	3	9	8	0
Q.6	10	6	4	0
Q.7	1	1	17	1
Q.8	0	3	13	2

Q.9-	Always	Usually	Sometimes	Never
a	2	3	6	8
b	7	4	8	1
c	7	7	4	2
d	12	6	1	0
e	12	5	2	0
f	5	4	6	5
g	2	4	4	9
h	0	0	8	12
i	12	6	2	0
j	4	11	2	2
k	10	6	2	0*

* plus (1) "I don't know what you mean."

	Always	Usually	Sometimes	Never
Q.10	10	2	5	2

Q.11		
a	ex bks	10
b	dics	3
c	job	8
d	stories	6
e	news	3
f	math	7
g	listen	4
h	speak	16
i	read	13
j	write	14

other: pronunciations...6 hrs./week
computer class...pronunciation...speaking better English...I like newspaper articles

Q.12	Always	Usually	Sometimes	Never
	13	6	1	0
	7	9	3	1
	8	6	5	0
	11	3	6	0

Q.13 Last year/Now	Always	Usually	Sometimes	Never
	3 5	7 10	10 5	0 0
	3 4	8 10	9 6	0 0
	2 2	4 9	7 9	7 0
	2 5	6 11	12 3	0 0
Q.14(as Q.13)				
	3 6	2 6	15 8	0 0
	3 5	4 9	12 6	1 0
	0 2	4 8	9 10	8 0
	3 6	3 10	12 4	2 0

Q.15	lot better	better	no change	worse
	5	14	1	0
	3	15	2	0
	0	20	0	0
	5	13	2	0

Q.16

COMMENTS: I would like to learn about speaking reading and conversation in my ESL class...I would like to learn ESL in class. I like to speak English well, and future in my job hope much better. I would like to be in college sometime... The best program for Bull employees...This is the best program for all companies in the country...

Q.17	Yes: 20	No: 0
	a	14
	b	13
	c	14
	d	17
	e	9
	Other:	0

Bull Worldwide: Appendix E

Questions for Bull ESL Program Student Focus Groups
July 1993

Introduction

Thank you for participating in this focus group.
I will ask you some questions about your class. These questions are a follow up to the survey you took a couple of weeks ago. We will use the information to improve the program.

Please understand two important things:
1. The questions I ask are not about your teachers. Not about Sue or Mel or Annie or Jim. Not about them as teachers. We are interested in your ideas about the program. We need to know what helps you to learn and what doesn't help you.
2. What you say is confidential. Noone will know what you say except Sue and me. We will take notes but we will not put your name on them.

I. Questions about work-related learning
- Are there alot of lessons about work?

Is this good or not? Why?

- Do you think that coming to class is important to keep your job? Why/what are the connections between coming to class and keeping your job?

- What is the best way for you to learn about work-related things?

Probes:
-- Use work related materials in class? (example: MSDSs in class?)
-- Talk to each other alot about what you have to do on your job?
Why is this a good way to learn?
-- Read more Why?
-- Write more Why?
-- Use the computer more Why?

- Option: if class did not focus on work, what should it focus on?

How would you transfer what you learned to doing your job better

- Option: What helped you the most to improve your English skills

Probes:
-- something the teacher did
-- something you learned
-- something you felt about yourself

II. Using computers

- Did you use a computer? What did you do on it?

- How did you like using a computer? Is there anyone here who did not like using one? Why didn't you like it? (something in the technology? in the instruction? in you?)

- Did you have alot of support for using computers? Was having support important to you? Describe the kind of support you need.

- How did you feel about: Using the keyboard (typing)? Sitting in front of the computer for long periods of time? Reading instructions on the screen that told you what to do next?

Probe:
scary
comfortable
positive
negative
If you were uncomfortable, what would make you more comfortable?

- Would you like to spend more time with the computer? If yes, what would you like to learn to do with it?

III. Tell us how you have changed as a result of being in the class, how you would like to change more and how the class can support you best to change.

Bull [illegible] Appendix F

Bull ESL Program

Survey for Managers 1993

Introduction:

Thank you for agreeing to participate in the evaluation of the Bull English as a Second Language (ESL) program. Your answers to this questionnaire are part of a larger evaluation that will help the planning and evaluation to improve the program.

Although we ask you for ratings on individuals, the information gathered will be used to guide program improvement. We are interested in what the aggregate ratings tell us about the program. Some of the items included in this questionnaire have not been covered in class.

Instructions:

- Please rate the following communication behaviors for each associate in your line or department who is enrolled in the ESL class.
- Please rate each associate twice. The first time, circle the answer which best describes the associate **LAST YEAR**, before s/he attended the ESL class. The second time, circle the answer which best describes the associate **NOW**. Use the comments section at the bottom of each page to explain your answers further, if you like. If you need more space, use the back of the questionaire.
- All the information is confidential. Only the person who handles the data will see your name and the name of the associate.

Your name:____

Name of the associate you are rating: ________________________

The associate:

1. Speaks up in meetings.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

2. Appears to say what's really on his/her mind in meetings.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

3. Talks informally with leaders.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

4. Talks informally with co-workers in English.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

5. Asks leaders questions when s/he needs to.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

6. Asks co-workers questions when s/he needs to.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

Comments: (Please indicate the number of the question you are commenting on)

____

____

____

7. Is understandable.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

8. Uses technical terms.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

9. Makes suggestions about how to improve the way we work.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

10. Attempts to read or reads items such as written process changes, S.O.D.s, M.S.D.S s, company policies, and blueprints.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

11. Appears to understand items such as written process changes, S.O.D.s, M.S.D.S s, company policies, and blueprints.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

Comments: (Please indicate the number of the question you are commenting on)

12. Makes appropriate use of items such as written process changes, S.O.D.s, M.S.D.S s, company policies, and blueprints.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

13. Appears to understand safety signs.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

14. Writes memos.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

15. Writes notes to co-workers (such as a note to the next shift).

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

16. Appears to understand me when I speak.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

Comments: (Please indicate the number of the question you are commenting on)

17. Appears to understand others (such as engineers) when they speak.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

18. Appears to understand co-workers when they speak in English.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

19. Appears confident in her/his ability to learn.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

20. Appears motivated to continue learning.

• LAST YEAR
always usually sometimes never does not apply

• NOW
always usually sometimes never does not apply

Comments: (Please indicate the number of the question you are commenting on)

____

____

____

21. Is there anything else you would like to say about:
• How associates have changed?______________________

____

____

____

• The program?______________________________

____

____

Bull Worldwide: -- Appendix G

EVALUATION RESEARCH
130 Warren Street
Newton Center, MA 02159
Phone: 617/527-6081

TO: Members of the Bull Basic Skills Planning and Evaluation Team

FROM: Laura Sperazi LS

RE: Questions for Managers' Focus Groups

DATE: September 27, 1993

There will be two managers' focus groups. One group will be held on Wednesday, October 6 from 5:00 - 6:00 p.m.; the second will be held on Friday, October 8 from 7:00 - 8:00 a.m. Managers can attend either group. Jim, Sharon, and Laura will staff the groups. Laura will take the lead in asking questions; Jim and Sharon will take the lead in providing information about the ESL program and how managers can become more involved in it.

All managers -- except L. Magdalenski (sp?) -- have associates who are enrolled in the ESL program. All managers are expected to attend one of the focus groups. The PE Team is supposed to come up with a more-interesting name for the groups than "focus groups." The hope is that the more-interesting name and a good outreach effort will ensure that all managers attend.

Part I: Questions for Managers

Introduction:

-- Thank you for participating in this focus group

-- These questions are a follow up to the survey you took a couple of weeks ago (OK if you didn't fill out the survey; we still want to know what you think about the ESL program.)

-- Focus group is divided into two sections: asking you some questions about what you have observed about associates' participation in the ESL program in the last year or so; and giving you some information about the program for this coming year

-- We will use the information you give us today to improve the program

1. What new skills, behaviors or attitudes have you observed in associates in the last year (or so) that you think are the result of participation in the Bull ESL program?

Part II: Information about the ESL Program

Themes for Jim and Sharyn to work with:

1. The IEP Process

• What is the IEP process? Describe IEP process as "checkpoints for progress" for the mutual benefit of associate and company. Reassure managers that associates are not left on their own to sink or swim but that there is a mechanism for tracking progress.

2. How can managers help to support the ESL program? Specific suggestions and discussion re: how managers can support the program

-- Identify associates who need ESL instruction. What are some of the indicators that an associate needs ESL instruction? Use handout.to support discussion.

-- Encourage associates to enroll

-- Tell teachers and other education staff that someone needs support

NOTE: The ESL program will allow one hour of planning time each week for each teacher. This means that you can expect to see teachers on the floor, observing work, talking to associates and generally becoming more knowledgeable about Bull manufacturing processes and work culture. The teachers are available to you if you questions about the program, an idea you want to pass on, information about a particular associates or associates -- whatever. One of the responsibilities which the teachers have is to integrate the real demands of work into the classroom. They will appreciate any way you can help them do that.

-- Other ways managers can become more involved in the ESL program. Use handout to support discussion.

* Participate in conferences with the with the associate and teacher (as part of the IEP process)

* Review curriculum, critique it, add to it.

* Be a speaker in a class

* Volunteer to be a language coach or tutor

* Learn more about the Jostens computer learning system which will be installed in the plant soon, and create a role for yourself which supports the use of the system.

Probe: Any changes in:
- Listening skills
- Speaking skills
- Computer skills
- Reading work documents

2. As you look forward, what expectations do you have for what the Bull ESL program can achieve?

Probe: Think specifically about associates you know who are enrolled in the program.
- What did you expect from associates in the past year because they were enrolled in the ESL program?
- What do you expect now ?

3. Did you observe associates doing homework this past year?

Probe: (1) What exactly did you observe?
- Doing homework on work time
- Doing homework "in teams"
- Talking about homework
- Showing others that they had done their homework
- Other

(2) Did/do you have any opinions about these activities?

4 What kinds of changes -- in skills, behaviors, attitudes, or other areas -- would you like to have tracked as part of the ESL assessment process?

Question #4 leads us into Part II of the focus group where Jim and Sharyn convey some information about how the program operates and is integrated with overall Bull manufacturing and education goals. This information is conveyed with the purpose of increasing managers support of and involvement in the program.

Part II: Information about the ESL Program

Themes for Jim and Sharyn to work with:

1. The IEP Process

• What is the IEP process? Describe IEP process as "checkpoints for progress" for the mutual benefit of associate and company. Reassure managers that associates are not left on their own to sink or swim but that there is a mechanism for tracking progress.

2. How can managers help to support the ESL program? Specific suggestions and discussion re: how managers can support the program

-- Identify associates who need ESL instruction. What are some of the indicators that an associate needs ESL instruction? Use handout.to support discussion.

-- Encourage associates to enroll

-- Tell teachers and other education staff that someone needs support

NOTE: The ESL program will allow one hour of planning time each week for each teacher. This means that you can expect to see teachers on the floor, observing work, talking to associates and generally becoming more knowledgeable about Bull manufacturing processes and work culture. The teachers are available to you if you questions about the program, an idea you want to pass on, information about a particular associates or associates -- whatever. One of the responsibilities which the teachers have is to integrate the real demands of work into the classroom. They will appreciate any way you can help them do that.

-- Other ways managers can become more involved in the ESL program. Use handout to support discussion.

- * Participate in conferences with the with the associate and teacher (as part of the IEP process)
- * Review curriculum, critique it, add to it.
- * Be a speaker in a class
- * Volunteer to be a language coach or tutor
- * Learn more about the Jostens computer learning system which will be installed in the plant soon, and create a role for yourself which supports the use of the system.

G4

Bull Worldwide Appendix H

IEP Bull Worldwide Information Systems

Name______________________________

Class______________________________

Teacher______________________________

Overall Goals

Where you hope to go with your education in the long run or where you hope the class will take you this year.

Work____

Personal____

Objectives

What you need to do now to move towards your goals.

1.____
2.____
3.____
4.____
5.____

This IEP is to be reviewed every 12 weeks by you and your instructor.

Signature____________________________ **Date**______________

IEP Bull Worldwide Information Systems

Name____________________________________

Competencies achieved that relate to specific objectives

Objective	Competency	Mastery Indicator	Mastery Date
____	____________________	____________________	________
		____________________	________
		____________________	________
____	____________________	____________________	________
		____________________	________
		____________________	________
____	____________________	____________________	________
		____________________	________
		____________________	________
____	____________________	____________________	________
		____________________	________
		____________________	________
____	____________________	____________________	________
		____________________	________
		____________________	________
____	____________________	____________________	________
		____________________	________
		____________________	________
____	____________________	____________________	________
		____________________	________
		____________________	________
____	____________________	____________________	________
		____________________	________
		____________________	________
____	____________________	____________________	________
		____________________	________
		____________________	________

Name: ______________________________________

Date: ______________________________________

Instructor: ______________________________________

STUDENT'S INDIVIDUAL EDUCATION PLAN

Skills	***Date/% of Mastery***	***Date/% of Mastery***
Oral Communication/Teamwork		
☐ ask questions for clarification	_____/_____	_____/_____
☐ discuss and interpret reading materials	_____/_____	_____/_____
☐ give directions and instructions	_____/_____	_____/_____
☐ make requests	_____/_____	_____/_____
☐ make small talk (social English)	_____/_____	_____/_____
☐ make suggestions	_____/_____	_____/_____
☐ report a problem	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
Listening Comprehension		
☐ follow and understand oral directions and instruction	_____/_____	_____/_____
☐ extract key information	_____/_____	_____/_____
☐ record key information	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
Phonics		
☐ identify and produce consonant sounds	_____/_____	_____/_____
☐ identify and produce double and triple consonant blend sounds	_____/_____	_____/_____
☐ identify and produce consonant digraph sounds	_____/_____	_____/_____
☐ identify and produce short vowel sounds	_____/_____	_____/_____
☐ produce vowels before r sounds	_____/_____	_____/_____

A. Yu and M. Green

Date/% of Mastery *Date/% of Mastery*

Phonics

☐ produce long (double) vowel sounds ____/____ ____/____
☐ produce long vowel sounds with E ____/____ ____/____
☐ produce irregular double vowel sounds ____/____ ____/____
☐ ____________________ ____/____ ____/____
☐ ____________________ ____/____ ____/____
☐ ____________________ ____/____ ____/____

Pronunciation

☐ practice stress, intonation, pitch ____/____ ____/____
☐ ____________________ ____/____ ____/____
☐ ____________________ ____/____ ____/____
☐ ____________________ ____/____ ____/____

Vocabulary/Spelling

☐ use **QuickWords** for spelling of sight words ____/____ ____/____
☐ expand word forms using **Spellex** ____/____ ____/____
☐ determine unfamiliar vocabulary through context ____/____ ____/____
☐ find synonyms and antonyms for familiar words ____/____ ____/____
☐ expand vocabulary through the understanding of suffixes and prefixes ____/____ ____/____
☐ use a dictionary ____/____ ____/____
☐ understand and use vocabulary as related to workplace competencies ____/____ ____/____
☐ ____________________ ____/____ ____/____
☐ ____________________ ____/____ ____/____
☐ ____________________ ____/____ ____/____

Reading

Read a variety of reading materials and experience a variety of activities focusing on:

- ☐ identify alphabet ____/____ ____/____
- ☐ determining the main idea ____/____ ____/____
- ☐ finding the facts ____/____ ____/____

	Date/% of Mastery	Date/% of Mastery
Reading		
☐ drawing conclusions	_____/_____	_____/_____
☐ making inferences	_____/_____	_____/_____
☐ developing vocabulary	_____/_____	_____/_____
☐ summarizing passages, stories, articles	_____/_____	_____/_____
☐ determining fact from opinion	_____/_____	_____/_____
☐ analyze characters	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
Writing		
☐ write letters of the alphabet in print and cursive form	_____/_____	_____/_____
☐ write correct word order (subject-verb-object)	_____/_____	_____/_____
☐ use correct punctuation and capitalization	_____/_____	_____/_____
☐ combine sentences	_____/_____	_____/_____
☐ use process writing (draft, edit, revise)	_____/_____	_____/_____
☐ understand the use of editing symbols	_____/_____	_____/_____
☐ develop writing using a visual (pictures) guide	_____/_____	_____/_____
☐ write answers to questions to form a story (given who, what, when, where, why questions)	_____/_____	_____/_____
☐ group sentences into paragraphs	_____/_____	_____/_____
☐ write story based on a given topic	_____/_____	_____/_____
☐ write summaries	_____/_____	_____/_____
☐ write instructions and directions	_____/_____	_____/_____
☐ use computer for word processing	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____
☐ ____________________	_____/_____	_____/_____

Grammar

	Date/% of Mastery	*Date/% of Mastery*
☐ simple present	____/____	____/____
☐ present continuous	____/____	____/____
☐ past tense	____/____	____/____
☐ regular verbs	____/____	____/____
☐ irregular verbs	____/____	____/____
☐ future tense	____/____	____/____
☐ parts of speech	____/____	____/____
☐ nouns	____/____	____/____
☐ verbs	____/____	____/____
☐ adjectives	____/____	____/____
☐ adverbs	____/____	____/____
☐ review or introduce new grammar as it occurs in curriculum	____/____	____/____
☐ ______________________	____/____	____/____
☐ ______________________	____/____	____/____
☐ ______________________	____/____	____/____

Name: ______________________________

Date: ______________________________

Instructor: ______________________________

BULL WORKPLACE CURRICULUM
STUDENT'S INDIVIDUAL EDUCATION PLAN

	Date/% of Mastery	Comments
AROUND THE PLANT		
☐ Understand abbreviations	____/____	____________
☐ Understand and give directions around the plant	____/____	____________
☐ Name plant areas and functions	____/____	____________
☐ Understand stock and shelving systems	____/____	____________
☐ Name components	____/____	____________
☐ ____________	____/____	____________
☐ ____________	____/____	____________
☐ ____________	____/____	____________
SAFETY		
☐ Read safety signs	____/____	____________
☐ Recognize types of emergency equipment	____/____	____________
☐ Recognize types of safety equipment	____/____	____________
☐ Give and understand warnings	____/____	____________
☐ Be aware of hazards in the workplace	____/____	____________
☐ Read chemical hazard warning	____/____	____________
☐ Understand Right to Know law	____/____	____________
☐ Understand short and long term hazards	____/____	____________
☐ Read MSDS for significant items	____/____	____________
☐ ____________	____/____	____________
☐ ____________	____/____	____________
☐ ____________	____/____	____________
HEALTH		
☐ Name parts of body	____/____	____________
☐ Name aches and pains	____/____	____________

	Date/% of Mastery	Comments
☐ Call in sick	____/____	________
☐ Name work-related aches and pains	____/____	________
☐ Explain symptoms (e.g. to a doctor)	____/____	________
☐ Write out injury report	____/____	________
☐ Fill out health record form	____/____	________
☐ Understand simple exam procedure	____/____	________
☐ Understand health care choices	____/____	________
☐ ________	____/____	________
☐ ________	____/____	________
☐ ________	____/____	________

JOBS

☐ Name Job title and basic function	____/____	________
☐ Identify main functions in job	____/____	________
☐ Answer questions about job and skills necessary	____/____	________
☐ Highlight skills needed for job	____/____	________
☐ Explain job to visitors	____/____	________
☐ Identify changes in job during tenure	____/____	________
☐ Write free description of work and work day	____/____	________
☐ Carry out "value-added" analysis of job	____/____	________
☐ Fill out forms associated with job	____/____	________
☐ Read documentation necessary for job	____/____	________
☐ ________	____/____	________
☐ ________	____/____	________
☐ ________	____/____	________

QUALITY

☐ Use defects vocabulary	____/____	________
☐ Describe quality problems related to job	____/____	________
☐ Complete quality check forms	____/____	________
☐ Be aware of continuous improvement procedures in company	____/____	________
☐ Discuss changing roles of workers	____/____	________

	Date/% of Mastery	Comments
☐ Understand performance review process: set goals	____/____	________
☐ ________	____/____	________
☐ ________	____/____	________
☐ ________	____/____	________

COMMUNICATION

☐ Understand instructions	____/____	________
☐ Give instructions	____/____	________
☐ Ask for clarification	____/____	________
☐ Make requests	____/____	________
☐ Make small talk (social English)	____/____	________
☐ Learn "Action" verbs: common and Bull-specific	____/____	________
☐ Make suggestions	____/____	________
☐ Report a problem	____/____	________
☐ Write down ideas	____/____	________
☐ Develop and apply team skills	____/____	________
☐ ________	____/____	________
☐ ________	____/____	________
☐ ________	____/____	________

TEAM EVALUATION AT DATATEC INDUSTRIES: A CASE STUDY FROM A WORKPLACE EDUCATION PROGRAM

Prepared
by
Paul Jurmo

One of seven case studies in
"Team Evaluation:
Case Studies from Seven Workplace Education Programs,"
a report prepared in June 1994
by Laura Sperazi and Paul Jurmo

DATATEC INDUSTRIES, INC.

Fairfield, New Jersey

I. PROGRAM BACKGROUND

Program history

Datatec Industries, Inc. is a rapidly-growing manufacturer of components for computerized equipment, with eight plants around the U.S. (Their products include computer boards for the laser scanners used at Toys R Us and other major retailers.) At the main plant in Fairfield, New Jersey in late 1990, the human resources director had concluded that many of the primarily-Hispanic assembly workers could benefit from an ESL course. The director investigated several language institutes and had potential participants interview instructor candidates.

Language Training Institute (LTI), based in nearby Englewood Cliffs, was hired, and classes were begun with fifteen learners. These learners were divided into three groups according to language ability. Instruction was "competency-based," focusing on language needs identified by the company and participants.

Program goals

To keep up with the rapidly-growing demand for its products, the company had in recent years instituted a quality program emphasizing high quality work by all employees. The ESL program was seen as a way of enabling immigrant production workers to participate fully in that quality program. They would thereby improve productivity, decrease error, use more-complex equipment, and communicate and solve problems in teams. The focus of the classes has varied periodically according to learner needs. These include oral skills, writing, spelling, public speaking, expression of opinion, fast listening, and grammatical accuracy. The instructor consciously integrated assertiveness and team-building exercises with language instruction. Presentations made by learners at company events served as markers of learner progress.

II. BACKGROUND ON THE TEAM

History of the team

In its first two years, the Datatec program was coordinated primarily by LTI director Joy Noren in consultation with Larry Tourjee, the vice president of manufacturing. In early 1993 Joy and Larry agreed to have the program serve as a site for Paul Jurmo's research. At that point, the following planning team was put in place:

Stakeholders represented on the team

Josefa Aboleda: Assembler, program participant
Lucia Izquierdo: Assembler, production team leader, and program participant
Paul Jurmo: outside facilitator
Joy Noren: education consultant, program coordinator
Patti Scharf: Purchasing agent
Larry Tourjee: Vice president of manufacturing

Larry and Joy selected these members based on the following criteria:

Patti Scharf: Selected because of her demonstrated interest in the program from its inception and because of her willingness to mentor learners. Also has regular contact with many of the Spanish-speaking employees on a day-to-day basis.

Josefa Aboleda and Lucia Izquierdo: Selected because (1) their language proficiency level would allow them to participate in team meetings, (2) they both express their opinions and ideas openly, and (3) they interact with a wide range of production employees, especially the ESL program participants.

III. THE PROCESS WHICH THE TEAM WENT THROUGH

Phase I: Initial preparations

To familiarize himself with the program -- and vice versa -- the facilitator, Paul Jurmo, first talked with coordinator Joy Noren by phone. She explained the history of the program, focusing in particular on what she needed and had in terms of assessment and planning mechanisms. (While the company set broad goals, the learners "filled in the blanks" in program objectives by bringing in problems and interests from their daily work. She wanted to find a way to get more input from higher- and supervisory-level management in setting course objectives.)

She also explained the company context, particularly the company's shift toward a "quality team" format.

Based on that input, the facilitator submitted a proposal to Joy and Larry. It outlined the history of the NIFL research project and what it might produce for the program stakeholders. It also described roles which stakeholders might play on the planning team.

Larry responded enthusiastically to the proposal, and he, Joy, and Paul met to discuss the proposal in more depth. Paul also observed a class session and talked briefly with the learners. He then was led by one of the more advanced learners on a tour of the production area where most of the learners worked.

Based on the information gathered in the above activities, the facilitator wrote an abridged version of his proposal (called an "action plan") which Joy Noren circulated among key management personnel at the company. She and Larry identified the above-identified (See "Background on the Planning and Evaluation Team") team members.

Paul met with Joy to review the background of each team member and the roles they would play in the project. Joy noted that, until now, the union had not been involved in the education program and would therefore likely not be involved in the evaluation project.

She noted that learners understand the company's reasons for setting up the program: enabling them to understand new equipment and to become more involved in their work teams. Many had an interest in improving those job-related abilities. Many also were motivated for personal reasons, such as using English with their children.

She said that, although the company wants clearer communication, more "unity" between American and non-American employees, error reduction, and improved production, more work is necessary to analyze the specific tasks which learners need to perform to meet those larger goals. She hoped to establish clearer communication with management representatives, so that she can be more clear about what management needs. To date she has relied primarily on input from learners, trying to gear the curriculum to both the company's broad goals and learners' personal goals. She felt that it is difficult,, given the limited time for the course, to respond to a broad mix of company and learner goals.

Joy hoped that the evaluation process would clarify for her how to set goals and to measure them in a way which would demonstrate tangible results to those who need to support the program.

She until now has set goals for short, 8-week blocks, changing them depending on what's going on in the company at any time. For example, "teamwork" was a focal point for some time, and her classes read and talked a lot about it. She has not put the resulting learning activities together in a systematic curriculum.

To measure results, she builds in "competency markers." These include a task which learners role play; periodic checklists in which learners assess progress toward mastery of various competencies; or mini-quizzes on topics requested by learners or Larry (in one such quiz, learners spelled words taken from the workplace). While such assessment tools produce useful data on learner progress, she feels that they need to be better organized.

In late March and early April, Paul interviewed Patty Scharf, Josefa Aboleda, and Lucia Izquierdo, the remaining three members of the planning team. They discussed the purposes of the program, their roles at the company, what the program has accomplished so far, and things blocking learners' participation. These interviews thereby enabled Paul to better understand the program, while allowing him and team members to get to know each other and better understand their respective roles in the evaluation.

Phase II: Planning the evaluation

Clarifying program goals and the information to look for

In the first meeting on April 7th, Paul led the team through a 90-minute discussion of three questions:

1. What do we mean by the term "evaluation"?
2. Who will be the audiences for this evaluation?
3. What types of information do our audiences want?

Paul recorded members' answers on flipcharts, and later typed up minutes summarizing what the team stated. At the end of the meeting, it was agreed that Patty, Josefa, and Lucia would talk with representatives from the primary audiences to ask them:

1. In our evaluation report, what kind of information about the ESL program should we include? Why do they want that information?
2. What do they think the ESL program's goals should be?

On April 21st, the team met for the second time, for nearly two hours. Paul again served as discussion leader, leading the team through the following questions:

1. What types of information do our audiences want?
2. For what purpose do they want that information?
3. What should be the goals of the ESL program?
4. For the highest-priority goals,what would be evidence of success/progress?

To answer question #1, Patty, Josefa, and Lucia explained that they had conducted interviews with eight co-workers (including the company president) in the past few weeks. These sources had identified questions which they hoped the evaluation would answer for them.

To answer question #2, the team brainstormed a number of ways the audiences might use the information. These included: determining return-on-investment; and deciding whether and at what level to continue the program, how to improve communication within the production area, how to improve the education program, and how to motivate learners.

To answer question #3, Paul first summarized what the team members had previously told him (in Phase I) they considered to be the program's goals. This was a lengthy list, divided into major categories of "English on the job" and "English off the job." Each category, in turn had sub-categories containing specific tasks (e.g., participating in team meetings, identifying problems, asking for help, reading notices, etc.). He asked team members to review this list, revise it as necessary, and identify which goals were of particular importance.

At this point, the discussion became bogged down. This was due to a number of factors including (1) some team members were not familiar with the language and concepts being used in the meetings, and (2) a large number of complex tasks were being presented in a short time. Discussion got stuck on particular details (e.g., meanings and phrasing of particular terms). The discussion -- and the team's energy -- ground to a near halt.

Joy Noren then introduced another, more concise list of "competencies" which she had been organizing the program around. It was agreed that this list was similar to Paul's list and -- for clarity's sake -- might be a better list to consider as the program's goals.

To try to rejuvenate the discussion, Paul moved on to the last question of "For the highest priority goals, what would be evidence of success/progress?" However, the team had said that all of the goals or competencies discussed so far were important. As time ran out at the end of the meeting, it was agreed that team members would on their own brainstorm a list of possible indicators (evidence) of progress toward goals which they feel are particularly important.

On May 5th, the team met to identify "indicators" for the goals which the team had listed on April 21st. Team members had tried to come up with questions to ask related to those goals, and in this meeting they shared what they had come up with.

Unfortunately, the discussion rapidly became bogged down. Members weren't clear exactly what they were being asked to do.

They focused on details of wording of a small number of indicators and never got to other ones.

One team member suggested that, rather than develop indicators in isolation from the instruments they were to be used in, the team should focus on developing one sample instrument. Time ran out before anything tangible was accomplished, and team members left the room frustrated and confused.

At this point the facilitator felt he was in danger of "losing" the team. He concluded that the team had gotten off to a good start, but that in the last two meetings members had become bogged down in details of a complex, unfamiliar, and abstract task. In consultation with the coordinator, he decided to leap ahead a few steps and do some "detail work" which, he hoped, would break this log-jam.

Designing a strategy for gathering data

On May 12th, the facilitator shifted the discussion to deciding what data-gathering activities the team might use. He hoped that this would give the team something more clear and concrete to focus on.

He presented a list of possible data-gathering activities developed by the coordinator. He then revised that list to include the following possible activities:

Gathering information from learners:

- Interviews with learners
- Oral simulations (tests)
- Written simulations (tests)
- Grammar mini-quizzes
- Mini-quizzes on workplace vocabulary
- Observation of learners using particular skills in the workplace
- Leadership projects (in which learners use particular skills to achieve goals set by learners, teacher, and supervisors)

Gathering information from co-workers and supervisors:

- Interviews conducted pre- and post, to identify needs, learner abilities, and steps to help achieve goals.

The facilitator suggested that, to keep the process moving, he and the coordinator develop several of the above activities and present them to the team at the next meeting. The team agreed.

Desiging data-gathering instruments

In the next two weeks, the facilitator and coordinator divided up this task. The coordinator put together most of the above activities for gathering information from learners. She planned to organize the resulting data in individual portfolios for each learner. Results of those activities could then be summarized and presented to management. The facilitator, meanwhile, designed interview guides for interviews to be conducted with learners and co-workers. He also developed an "interest inventory" in which learners would identify topics which they would like to focus on in the classes.

At a meeting on June 2nd, the team reviewed the draft instruments designed by the coordinator and facilitator. It was agreed that the coordinator would try out her instruments in the coming month, while the facilitator would interview learners. A third team member, Patty Scharf, was to interview several co-workers.

The team also set some guidelines for the interviews. These included confidentiality, sensitivity, and limiting interviews to 15-20 minutes each.

Phase III: Gathering, organizing, analyzing, and reporting the information

Gathering and organizing the data

During the next three weeks, the agreed-upon interviews were conducted with learners and co-workers, and in-class assessment activities were carried out. Those conducting these activities recorded the results in draft form.

Analyzing the data

On June 30th, the team met to review the data gathered in the above activities. When the member who interviewed co-workers reported her findings, her data indicated that the three co-workers were generally skeptical about the program and the seriousness of many of the participants.

This finding came as a blow to other team members, who questioned not only the validity of those co-workers' observations but the tone in which they were conveyed. The team was also told that a higher-level manager was not pleased with the direction which the evaluation had taken. He said that he had expected the evaluation to generate quantifiable evidence of learner competencies and not get off into feedback from co-workers and questions related to how to improve the program.

This negative feedback from supervisors about the program and from the higher-level manager about the evaluation was a shock to the coordinator and facilitator. It was agreed that the evaluation had not produced clear evidence of learner progress. Instead, a lot of attention was being given to negative comments of a small number of co-workers who in some cases had little direct knowledge of what was going on in the classes. It was agreed that the feedback from co-workers led to a number of other questions:

- Were learners actually learning anything in the classroom?
- If they were developing competencies, why weren't co-workers observing the learners using those competencies on the job? Were they simply not paying attention? Or were learners not in fact using them?
- If learners were developing competencies in the classroom but not using them on the job, what was preventing them from doing so?
- What can be done to help the coordinator be sure that the program focuses on job tasks which the company holds as important?
- What are effective ways of documenting what learners are actually learning and then showing that evidence to co-workers and others in the company?

Given the mood and confusion created by the feedback from co-workers and from the higher-level manager, the team did not go much further in interpreting the data. It instead agreed that, in order to show higher management what the team has been doing, the facilitator would now take the information gathered in the learner and co-worker interviews and summarize it for interpretation by the team at a later meeting.

The facilitator then spent a good part of a day at the word processor, preparing a preliminary summary of the data gathered in the interviews with six learners and three co-workers. This summary was broken down into three sections:

1. What we hoped to learn: The six key questions which the evaluation set out to answer:

    1. In what ways do Datatec employees have a problem communicating in English? How do these problems impact the employees and the company?

    2. What should the English program be trying to accomplish?

    3. What in fact is being achieved by the program? Are Datatec employees now better able to communicate in English?

    4. What factors are contributing to the program's success? What factors are inhibiting progress?

    5. Should the program continue?

    6. If the program continues, what steps need to be taken -- and by whom -- to help achieve the program's goals?

2. How we gathered information: A summary of the various data-gathering activities used: interviews with learners and co-workers, formal and informal testing, the facilitator's earlier interviews with team members, and the facilitator's tour of the worksite and review of documents.

3. A summary of the information gathered: This section was organized around the six key questions listed under "What we hoped to learn" above. For each question, the pertinent data gathered from the various sources were summarized. At the end of each set of data, the question "What is your response to the above information?" was presented, followed by lines where the reader could jot comments.

The facilitator sent copies of this 8-page summary to each team member with a memo asking each team member to review the summary before the next team meeting. Members had one week to look over the data and jot down any comments or questions provoked by the data.

The facilitator and coordinator were sensitive that, at the last team meeting, they had received negative feedback about the pace and direction of the evaluation. Both the facilitator and coordinator had after that meeting sent notes to upper management to respond to those concerns. The coordinator and facilitator also met to review the preliminary summary and agree on the agenda for the next meeting. They agreed that the meeting needed to be well run and produce clear results.

At that next meeting, on August 11th, the hoped-for results did occur. The facilitator and coordinator co-facilitated the meeting and led the other members through a systematic analysis of each section of the data.

As members responded to the data, their comments were recorded on flipcharts. It was agreed that the facilitator would now incorporate their comments and the original data into a draft of a final report. This meeting ended on a higher note than some of those which more immediately preceded it. Members felt they had actually generated some useful information and been able to learn something from it.

When writing up the team's analysis into a draft report, the facilitator realized that he had additional interpretations of his own. He however wanted to avoid mixing his interpretations in with the other team members', in order to preserve the integrity of what the team members had said. His solution was to add another category for each section of the data titled "Outside facilitator's interpretations and recommendations."

In the summary, then, the data were organized according to the six key questions which the evaluation had set out to answer. Following each set of data were two sets of interpretations: those of the on-site team and those of the outside facilitator.

The facilitator circulated this draft of the final report to the team to review prior to the next meeting, held on September 22nd.

Just prior to that meeting, the facilitator conducted three additional interviews of co-workers. The team had asked him to do so because they wanted to clarify whether all co-workers felt so negatively about the project as did the first three who were interviewed. In the three additional interviews, the facilitator found a good deal of support for the program and for the learners.

At the team meeting which followed, the team reviewed the contents of the draft report. Members agreed with the contents of the report and asked that the facilitator also prepare an executive summary. That summary was to emphasize concrete actions which might be taken -- and which had already been taken -- in response to the evaluation process. The team felt that the upper-level managers who constituted the primary audience for the report would be particularly interested in evidence of how the program was continually improving itself.

The facilitator was pleased to see that, in this September 22nd meeting, the team had suddenly taken control of the process. The discussion flowed smoothly and naturally, with a positive, action-oriented tone. In meetings up to that point, the facilitator had stood at the helm, directing the content and flow of discussions. In this meeting, team members didn't look to him for guidance but instead spoke freely and pointedly about how to pull together a final report and what directions the team wanted to follow next.

Preparing a strategy for reporting the findings

Thus, in the September 22nd meeting, it was agreed that the facilitator would add an executive summary to the report which emphasized concrete, positive actions the team had been taking to improve the program based on evidence gathered in the evaluation. In other words, the executive summary was to avoid dwelling unnecessarily on negative comments, but instead emphasize positive action.

To help the facilitator prepare this action-oriented executive summary, the coordinator provided various memos and other documents showing examples of the actions she had been taking in recent months to improve the program. The facilitator incorporated those examples with other recommendations which the team had come up with in the analysis process.

He faxed the resulting report to team members for additional feedback. By October 20th, the final version of the report was in the mail to the team members.

At the September 22nd meeting, in addition to making final decisions about what went into the final report, the team decided what it would do with the report when it was done. The team decided to prepare a summary of the key findings for the company newsletter. It was also agreed that copies of the report would be submitted to the upper-level managers who were to have been the primary audience.

Team members also agreed that, as the report was prepared, evaluation teams need to take special care to maintain confidentiality and sensitivity to the feelings of individuals affected by the evaluation. For example, if an informant is critical of someone else's performance, such criticism needs to be handled with sensitivity, to avoid embarrassing anyone involved or creating unnecessary conflict or hard feelings.

Reporting the findings

Key findings from the report were summarized in an article in the company newsletter. This summary emphasized the progress learners had made and its impact on the production area.

The report was also submitted to the plant managers who constituted the primary audience for the evaluation. At this writing, however, it is not known what response the managers had to the report.

Phase IV: Deciding what happens next

Taking follow-up action

As one result of the evaluation, the coordinator began developing ways of involving co-workers more actively in the program. For example, co-workers were invited to observe classes, and one agreed to do so. Team members also prepared a formal invitation for co-workers at all company sites to become language mentors to class participants and thereby involve themselves in direct, useful ways on an ongoing basis.

Within a month a newly-reinvigorated mentorship program was in place. Co-workers at not just the New Jersey plant but in other company facilities around the country have agreed to communicate with learners by phone and in writing. At the New Jersey plant, co-workers who signed up as mentors agreed to meet periodically with learners. A list of volunteers was circulated to learners, and learners chose whom they wanted to work with by "signing up." Learners then took the initiative to contact their mentors to get started. Mentors will be "circulated" every two months, to help co-workers and learners to get to know each other better and break down traditional barriers between learners and co-workers.

The team itself might be going through a transition. One supervisor has shown an interest in joining the team (which members renamed the education "action team.") The coordinator has suggested various ways of getting more employees involved in the team, including rotating members or holding open sessions which anyone can attend.

In her communications with supervisors and upper management, the coordinator felt that they had a general sense of progress about the class. She also talked individually with the upper manager on the team about how to link the program more directly with "teamwork" initiatives. This was an issue uncovered in the evaluation. One teamwork activity will be a "bilingual teamwork day" with special activities aimed at building communication between language groups.

Evaluating the evaluation

After the final report had been submitted to the team, the facilitator asked team members whether they might give feedback -- either in a team meeting or in writing -- on the evaluation process itself.

Feedback from coordinator: In writing, the coordinator gave the following feedback:

1. "The team concept with stakeholders from all dimensions of the company is a sound one. Unfortunately, the team frequently bogged down in negativity and confusion which I think could be avoided to a large degree in the future by:

- "Brief, practical tasks designed for information gathering (e.g., using simple charts where things could be listed or filled in, short lists of direct questions. A lot can be accomplished in a short time if the task is very focused.

- "Brief explantation of tasks with a minimum of academic language to allow 'easy entry.'

- "Balance of time early on in the process between gathering feedback from stakeholders and planning for change in response to feedback. (Practical results of the team's time need to be evident sooner.)

- "Spend time up-front with some team-building exercises to assure that the lines of communication are as honest as possible and to build trust in the group.

- "Invite co-workers to attend an open team meeting so they can better understand what the team is about and how it could benefit them."

2. "My original hopes for the project (. . . and what I actually achieved):

- "(Hoped for) better communication with stakeholders at Datatec. (Achieved) some progress in improving communication.

- "(Hoped for) assistance from evaluation consultants in developing better assessment tools and attitude inventories which would strengthen the program. (Achieved) not what I had anticipated.

- "(Hoped for) some national/state attention for Language Training Institute. (Achieved) nothing as yet.

- "(Hoped for) a knowledge of the team process as it applies to workplace education. (Achieved) I learned a lot through our difficulties as well as through the positives.

3. "What I liked and didn't like:

Liked:

- A chance to reflect on the program with others.
- A team model based on representation of all stakeholders.
- Constructive feedback and suggestions which contributed toward the improvement of the program.
- Documentation of our project.

Didn't like:

- The nature of activities in the meeting rarely motivated people to attend meetings and generally did not spark full participation or positive energy.
- The team never formed a true team.
- The project did not adequately compensate Datatec employees or the education consultant for time required on the project outside of work or class time.
- The data-gathering process appeared to be abstract and so lengthy that the credibility of the team effort became an issue among Datatec management. I felt responsible because I had introduced the project to Datatec.
- Negative destructive criticism was counter-productive. (Negative constructive criticism was useful.)

Feedback from Purchasing Agent:

- "Although, in recent months, upper management has a greater recognition of the ESL program's progress, I do not feel that it is largely due to the evaluation. Again, I don't feel there is a great deal of quantitative information in the report to give managers this impression. Instead I feel that it is due to the ESL students taking on a much more active co-worker role in the company. This may be due to the Mentor Program, which was a result of our study. Also, recently production employees have volunteered for more extra-curricular activities, and may be a result of more confidence in speaking English.

- "Honestly, I feel the study did not accomplish its original goal, which I understood was to identify marked improvement in the students' performance as a result of their new-found English skills. However, it did give a starting point to identify progress in the future. By marking their current levels of English proficiency, we will better be able to identify their progress in the future. Joy and I also meet regularly to brainstorm on new ideas to keep the program more interesting and providing short term goals for the classes to reach.

- "Another thing I felt to be misrepresented in the evaluation was the role of the facilitator. I felt that your role was more of an observer, who gave little direction in meetings and should accept more responsibility for discussions becoming bogged down. One of the roles of facilitator is to keep meetings moving smoothly and discussions from getting off track.

- "I did distribute our report back in the fall and, unfortunately, received no response from managers or co-workers. I don't feel discouraged, though. It has been an extremely busy year, and I am confident that the report was reviewed.

- "Again, I feel that the outcome of the committee's charter was positive. Joy has developed several quantitative measurement systems, the Mentor Program is going exceptionally well, Larry is more confident in the level of proficiency of most participants, and it has really opened doors of communication between Joy and other Datatec employees to receive feedback and suggestions for the program's goals."

Other team members gave similar indirect feedback through the coordinator. Some apparently were confused by the technical, "academic" nature of the process. Some also were confused and turned off when they didn't see any tangible results for their efforts. (For example, meetings would end in confusion; there would be time lags between meetings; it was not clear what response the intended audience had to the team's final report.)

IV. REFLECTIONS

Paul Jurmo's comments:

- The team members' analyses of the team process (See "Evaluation the evaluation" above) were essentially on target. The tasks given the team too often did become bogged down in confusion, leading to decreased team member interest.

  It might be noted, however, that essentially the same activities were used in other sites, with more-positive results. Why the difference between the Datatec site and other sites?

Time

In my view, a key difference at Datatec was the relatively small size of the company and education program. The small numbers of people involved meant that only a small number of people could serve on the team. Team members in turn had limited time they could spare away from their jobs, making it difficult to set aside enough time to consider all the questions being presented by the facilitator.

In other sites there were more people to spread the work around. At Datatec, there were only a few people and they could spare only a limited amount of time for a project brought in from the outside.

Motivation

The evaluation team concept at Datatec was an idea brought in by an outsider. In other sites, stakeholders had already formed some kind of collaborative planning structure and come to the conclusion that some kind of evaluation was needed. The Datatec program was probably to a certain degree getting into evaluation as a courtesy to the outside facilitator. When the process became bogged down, team members naturally questioned whether it was worth continuing if the reward for the effort was to go primarily to an outsider being paid for this project rather than to team members themselves.

It also appeared that some team members were looking primarily for quantitative evidence of positive program impact while the facilitator was hoping to provide an opportunity for team members to develop their own summative and formative data and a system for continually collecting and using such data. In other words, those team members had a different expectation for the evaluation than did the facilitator.

Infrastructure

The Datatec team was pulled together to work on this research project. It was not something which already existed, and team members did not have a team identity and a history of working together as a decision-making unit. Extra time was probably needed to create and nurture such a team infrastructure, but -- as noted above -- that time didn't exist. The facilitator tried to get on with getting the group to perform tasks which they weren't fully prepared for. This contributed to confusion and miscommunication.

The facilitator didn't realize that the Datatec team faced these limitations. He instead tried to forge ahead, to test his model. He didn't understand the causes of the confusion which resulted and didn't know how to handle that confusion. If he had, he might have done the things which the coordinator and purchasing agent suggested: clearer explanation of tasks, simplification of tasks, extra team-building activities, keeping meetings moving and discussions from getting off track, and so forth.

Despite these bumps in the road, the process did produce the positive results cited by the coordinator and purchasing agent under "Evaluating the evaluation" above. The outcomes which team members seemed to value were: clearer measures of learner abilities; improved communication between the coordinator and other company employees; greater involvement of other employees in the program (e.g., as mentors, shapers of curriculum, etc.); an increased willingness of learners to take on more-active roles in the company; and an overall greater interest by company employees to pay attention to the program, monitor its progress, and help it to work. These are potential positive outcomes which other evaluation teams might aim for.

Other teams, however, should carefully assess team members' time, skills, and interest level before embarking on an evaluation. Teams should also be clear what the facilitator's and other team member's roles will be. More specifically, in a traditional "outside" evaluation, most of the responsibility for designing instruments, collecting information, and analyzing it is in the hands of the outside evaluator. In a team evaluation, the facilitator helps teams make decisions about what information they want, develop their own instruments, gather data, and analyze the data. Teams need to be clear who plays what role in the evaluation process, given the time, skills, and interest level of all team members.

Teams can then agree on tasks which each team member can play. These tasks should be do-able, feasible, and meaningful for those involved. Members need to feel success -- a sense that they personally and the team as a whole are accomplishing something useful -- or they will get discouraged.

Teams also need a mechanism for dealing with confusion, frustrations, or conflicts which arise, so that they don't undermine the team's efforts. For example, if a team member agrees to design an instrument and doesn't do so, or if a facilitator tries to accomplish too much in an hour-long meeting, team members should have the trust and opportunity to resolve those problems promptly -- in the spirit of constructive criticism and continuous improvement.

DATATEC INDUSTRIES

APPENDIX

THE EMPLOYEE EDUCATION PROGRAM AT DATATEC INDUSTRIES, INC.:

EVALUATION REPORT OF THE EDUCATION PLANNING TEAM

Josefa Aboleda
Lucia Izquierdo
Paul Jurmo
Joy Noren
Patty Scharf
Larry Tourjee

October 20, 1993

CONTENTS

Page

Executive summary i

Introduction 1

What we hoped to learn 2

How we gathered information 3

How we organized and interpreted the information and made recommendations 4

The information we gathered and our interpretations and recommendations 5

Question #1: In what ways do Datatec employees have a problem communicating in English? How do these problems impact the employees and the company? 5

Question #2: What should the English program be trying to accomplish? 7

Question #3: What in fact is being achieved by the program? Are Datatec employees now better able to communicate in English? 8

Question #4: What factors are contributing to the program's success? What factors are inhibiting progress? 10

Question #5: Should the program continue? 14

Question #6: If the program continues, what steps need to be taken -- and by whom -- to help achieve the program's goals? 15

EVALUATION REPORT ON DATATEC EDUCATION PROGRAM

EXECUTIVE SUMMARY

In early 1993, Datatec organized a team to evaluate the company's employee English-as-a-second-languge program. The team was composed of four Datatec employees, the outside education specialist who runs the program, and a researcher funded by the National Institute for Literacy. From spring until September, team members collected information from program participants, several co-workers, and other sources. Summarized below are the team's findings and recommendations, organized around around six research questions:

Question#1: In what ways do Datatec employees have a problem communicating in English? How do these problems impact the employees and the company?

Oral communication is particularly important at Datatec. Employees are expected to be able to not only understand information conveyed from others but to make suggestions and give feedback to ensure product quality. Those who don't speak English as their first language too often have problems communicating in English. While many of these employees are able to understand what others say, they are reluctant to try to express themselves in English out of "shyness" (embarrassment, fear of making a mistake).

When employees can't or won't use English with co-workers, not only do communications slow down but team morale can be jeopardized if other co-workers become resentful.

In addition to oral English, all employees should be able to read and write basic documentation used in the plant.

Question #2: What should the English program be trying to accomplish?

From the beginning of the program, stakeholders have consistently stated that the program should aim at strengthening the abilities of participating employees to use English to solve problems they face on and off the job. More recently, the planning team has identified a second goal for the program: to help the organization as a whole to facilitate communication and teamwork among employees, particularly given the multicultural nature of the company workforce.

Question #3: What in fact is being achieved by the program? Are Datatec employees now better able to communicate in English?

Most learners appear to be using English on the job and with their families more successfully today than they did even one year ago. This is supported by anecdotal feedback from co-workers and learners, as well as by a number of assessment activities being used in the classroom. In the classroom, learners demonstrate growing abilities to use English in situations they encounter on the job.

In addition to the above hoped-for outcomes, a number of unanticipated benefits have resulted. For example, English-speaking co-workers cite improved relations with Spanish-speaking employees.

At the same time, there have been some instances of negative impacts. For example, some English-speaking co-workers resent the fact that, despite being given free classes, some learners continue to speak Spanish at work and/or don't take the classes seriously enough.

Question #4: What factors are contributing to the program's success? What factors are inhibiting progress?

Positive factors:

- A dedicated, creative, helpful teacher.
- A curriculum which is continually revised to keep it relevant as new needs and interests emerge.
- Co-workers who show support for learners by paying attention to them, making sure learners understand, and helping them to speak correctly.
- Hardworking learners.

- An environment which encourages all employees (including learners) to try new things and develop new skills.

Negative factors:

- Limited time for class. (It's very difficult to learn a new language with only 1.5 hours per week of formal instruction.)
- Other responsibilities (e.g., overtime, family, commuting, other jobs) which make it difficult for learners to study outside class.
- Inadequate commitment and effort by some learners.
- Lack of clarity (or perhaps interest) among co-workers about what is being achieved in class or how they can help.
- Confusion by co-workers about why learners use Spanish on the job even though they are attending class.
- Learners sometimes feel they aren't rewarded sufficiently even if they do improve their language skills.
- Some learners don't see themselves as ever being "English-speakers" or higher-status employees. They thus don't set high enough goals for themselves or adequately try to integrate into -- or take on new roles in -- the Datatec "culture."
- Co-workers who are insensitive to the special needs of limited-English-proficient employees.

Question #5: Should the program continue?

Virtually all respondents said that, yes, the program should continue. A few co-workers, however, stressed the need for stricter requirements for admission to the course and for being allowed to stay with the course. Those who don't demonstrate hard work should not be allowed to participate.

Question #6: If the program continues, what steps need to be taken -- and by whom -- to help achieve the program's goals?

The following are key recommendations based on feedback from learners and co-workers. Note that many of these recommendations are already being implemented, many as a result of this evaluation.

Communicate with others outside the classroom.

Too often, key Datatec personnel-- including both higher-level managers and co-workers on the shop floor -- aren't aware of what is being achieved in the classes or how they might support learners' efforts to learn English. The following measures might improve communication among all stakeholders:

Regular updates from instructor to management: The instructor has already increased the number of progress reports and requests for feedback she is submitting to company management. This should be continued. In turn, it is helpful when management pays attention and responds to those comunications, as they are a quick way to ensure that the program stays on track and gets the support it needs.

Ongoing team meetings, with expanded membership: Some version of the current planning team should be continued to provide an ongoing forum for monitoring and fine-tuning the program. Membership might be expanded to in some way include other management representatives, co-workers, and learners. (Perhaps not all team members need to attend every team meeting, but they would be available for input and other help as needed.)

Mentoring program: Team members are currently exploring establishing a "language mentor" program in which English-speaking co-workers could volunteer to be paired with learners. In those pairs, the English-speakers would be available to help with particular English-language questions. At the same time, the co-workers would better understand the needs, interests, and abilities of Spanish-speakers and be more likely to support the learners and the program. For this to work, special guidelines are being developed -- with input from learners -- to show mentors and other employees specific things they can do to help learners. Mentors might even include employees in other plants who would correspond with the learners.

Open houses: The program might invite co-workers to sit in on classes, hear reports from learners, respond to questions from learners, etc.

Newsletter articles: Team members -- and possibly learners themselves -- can write brief articles for the company newsletter, highlighting what is being achieved and soliciting co-worker ideas and help. One variation of this: interview employees and publish humorous excerpts. (One such article is currently being written by team members.)

Class publications: As class exercises, learners might prepare action plans, autobiographies, or other writings about topics of interest to them. These could be compiled into anthologies and distributed within the plant. These would give the learners a reason to practice their English, while helping co-workers to better understand the learners and the program.

Research projects: As a class activity, learners are selecting Datatec-related topics to "research" via interviews with other employees. Learners make class presentations based on the responses given in the interviews. Topics covered to date: teamwork, stress management, sexual discrimination and harassment, and company volunteer activites (e.g., the Cancer Foundation). In so doing, learners develop skills and knowledge, while getting to know co-workers; co-workers in turn get to know the learners and better understand what's going on in the classes.

International desserts party: Promote understanding of cultural diversity by hosting another party to which employees bring ethnic desserts.

Play: Learners join with other employees to produce a play, possibly to perform at international desserts party.

"Speak to Me in English" buttons: Learners might invite communication with English-speaking co-workers by wearing buttons with the words "Speak to Me in English."

Mini-Frost Valley: Host a one-day or half-day team-building session for learners and others who couldn't attend the Frost Valley team-building retreat.

Deal explicitly with intercultural issues.

Some co-workers don't understand why it seems to take so long for class participants to learn English. Some appear to suspect that learners simply aren't trying enough.

As part of the above communications with others outside the class, the team might deal with this issue head-on by discussing this and related issues directly with co-workers. The team might meet with co-workers who have questioned the pace of learning and ask directly whether those co-workers feel resentful. If so, why? What might be done about it?

Learners might delegate one or more of their fellows to serve as "cultural ambassadors" to the rest of the workforce. At the same time, those who volunteer as "language mentors" might play a similar role of facilitating communication between learners and co-workers.

Intercultural issues might be made an explicit focus of Datatec training and team-building activities. Within the ESL class, learners might analyze instances in which cultural differences blocked communication and develop strategies for reducing intercultural problems within the company.

In the process of discussing these issues, it might become clear that, for learners to reach their full potential at Datatec, the company might need to do more than just provide an English class, valuable though the class is. The company might also have to re-think how communication and teamwork are structured, so that learners work in an environment where they are truly able to use the skills they are developing in the education program. The company might, for example, consider the following initiatives: rewriting documents to ensure "clear language;" providing management personnel with special training in intercultural communications; and restructuring team meetings and other "feedback" systems to make it easier for self-conscious, limited-English-proficient employees to speak up with the ideas they have for improving operations.

Clarify expectations and monitor progress.

The above activities should help all stakeholders clarify expectations for the project. Other ways of doing so might include:

- Establish a portfolio assessment system. The instructor has already reorganized learner records in individual "portfolios" for each learner. Each portfolio contains vatrious kinds of evidence of the learner's goals and progress toward those goals.

  This is helpful for the instructor, the learner, and anyone else interested in understanding what is being achieved in the class.

- Demonstrate results in a clear, quantified, graphic way. The instructor is now, where possible, documenting learner progress toward goals in charts or other graphic forms familiar to Datatec co-workers. The instructor can show, for example, how participants have all successfully demonstrated twenty oral competencies in real-life situations (e.g., interacting with class visitors) and in simulations.

- Analyze what role communication plays in the plant. The team might conduct an organizational needs analysis to clarify what activities really require reading, writing, listening, and speaking skills. This analysis should also analyze written materials used in the plant, to clarify how they might be written more clearly to make them more accessible to learners and other employees. This would help the team clarify to what extent communication is blocked by learners' English skills or by other factors like poorly-run meetings, poorly-written documents, etc.

- With input from learners and other stakeholders, establish a set of "ground rules" or guidelines which all learners need to abide by. These might include doing homework, regular attendance, showing progress, etc. Learners should then formally agree to abide by those rules via a learning contract. (The instructor has already set up a learning contract with each learner, with the specifics of each contract decided by the learner.)

- Establish a fair set of guidelines for clear communication and teamwork. With input from learners, the team might prepare a set of guidelines for using English in the plant. Guidelines might emphasize the links between clear communication, teamwork, and quality. For example, they might go something like this:

> "Datatec emphasizes quality work in a team environment. Clear communication is key to making this work. All employees should use English to communicate with co-
>
> workers in a clear way, to identify problems, and jointly solve them. Communication and teamwork are two-way streets, requiring respect and extra effort to speak and write clearly and to listen carefully . . . "

Revise curriculum content.

As the above activities elicit clearer input from all stakeholders about specific knowledge and skills to focus on in the program, the instructor should revise the curriculum accordingly.

One example: the instructor is developing a leadership project which would require initiative, assertiveness, goal-setting, and interaction with American employees. All stakeholders are being asked to give specific ideas for such a project.

Provide more practice time.

Learners would like the company to find some way to provide more class time. The team should clarify whether this can be done in a way which would not be disruptive to production schedules.

At the same time, learners need to recognize that, if they are to make much progress, they need to make special efforts to use English outside of class hours. They need, for example, to try to use English with co-workers on the job. and they need to find ways to practice using English (e.g., tapes, TV shows, reading, night school, etc.) outside of class, as well.

Although most learners admittedly have many responsibilities which make practicing outside class difficult, they are unlikely to make much progress unless they do so. Learners must decide how important learning English is to them and then make special, sustained efforts to practice whenever they can. "Practice makes perfect" is a simple rule which applies to everyone, no matter what we might be trying to learn.

Provide incentives and opportunities to learners.

The company should continue to encourage learners to improve their abilities and take on new challenges. Learners should be encouraged to participate fully in job-rotation, improving operations by giving feedback to engineers, and various training and team-building activities. They will thus see reasons for learning English and using it.

INTRODUCTION

From April through September of 1993, an education planning team at Datatec Industries in Fairfield, New Jersey conducted an evaluation of the plant's employee English-as-a-second-language (ESL) program. The team used a new, collaborative approach to evaluation being developed with funding from the National Institute for Literacy by workplace literacy specialist Paul Jurmo. Rather than rely on an outside expert to evaluate them, the program's stakeholders would -- with Paul Jurmo as facilitator -- plan and carry out an evaluation of their own program.

Members of Datatec's planning team were:

- Josefa Aboleda: Assembler, program participant
- Lucia Izquierdo: Assembler and production team leader, program participant
- Paul Jurmo: Director of Literacy Partnerships, outside facilitator for the team project
- Joy Noren: Director of Language Training Institute, ESL instructor
- Patty Scharf: Purchasing agent
- Larry Tourjee: Vice president of manufacturing

This report presents:

- What we hoped to learn
- How we gathered information
- How we organized and interpreted the information and made recommendations
- The information we gathered and our interpretations and recommendations

This report is presented to the various stakeholders who have an interest in the Datatec education program. We hope that it will help them clarify how employee education can help both individual employees and the larger organization grow.

WHAT WE HOPED TO LEARN

In meetings in April 1993, the Datatec team agreed that it would collect several types of information related to the education program. We would, in effect, attempt to answer the following questions:

1. In what ways do Datatec employees have a problem communicating in English? How do these problems impact the employees and the company?

2. What should the English program be trying to accomplish?

3. What in fact is being achieved by the program? Are Datatec employees now better able to communicate in English?

4. What factors are contributing to the program's success? What factors are inhibiting progress?

5. Should the program continue?

6. If the program continues, what steps need to be taken -- and by whom -- to help achieve the program's goals?

HOW WE GATHERED INFORMATION

Team members gathered information in several ways from a number of sources, as follows:

- Co-worker interviews: Patty Scharf and Paul Jurmo interviewed six English-speaking Datatec employees who work closely with participants.

- Participant interviews: Paul Jurmo conducted individual interviews with six program participants, and briefly met with learners in their classes.

- Formal and informal testing: As part of day-to-day instruction, Joy Noren measured learner competencies using several informal and formal assessment instruments.

- Interviews with team members: Prior to the above data-gathering activities, Paul Jurmo interviewed all members of the team to clarify how learners currently use -- and should use -- the English language on and off the job.

- Observation of worksite and review of documents: Paul Jurmo informally toured learners' work areas, observed printed materials used at work, and reviewed work-related documents.

HOW WE ORGANIZED AND INTERPRETED THE INFORMATION AND MADE RECOMMENDATIONS

When the above data-gathering activities were completed, the outside facilitator identified which information corresponded to which of the original six questions the team set out to answer. (See "What We Hoped to Learn" above.) For each question, the facilitator organized the information according to its source.

With the data organized in this way, the facilitator presented a written summary of the information to the other team members. As individuals, they took a few days to review it and jot down comments or questions provoked by the data.

The team then met and went through the information, question by question. Team members interpreted and made recommendations in response to the data. These interpretations and recommendations were recorded on flipcharts and then compiled into the section directly below, titled "The Information We Gathered and Our Interpretations and Recommendations."

THE INFORMATION WE GATHERED AND OUR INTERPRETATIONS AND RECOMMENDATIONS

Summarized below are the information gathered and the team's corresponding interpretations and recommendations. The outside facilitator has added his own interpretations and recommendations in sections so named.

Question #1: In what ways do Datatec employees have a problem communicating in English? How do these problems impact the employees and the company?

What our sources said:

Planning team members are most articulate in identifying specific tasks requiring good English communication skills. Most of these are oral communications which learners need to perform with co-workers on a day-to-day basis. These include asking for clarification and help, making suggestions, and generally being prepared to handle new equipment and team-decision-making procedures.

Although learners and co-workers aren't as specific in their responses to this question, they do tend to see "reluctance to speak English out of embarrassment" as a common problem among learners. That is, both learners and co-workers tend to feel that learners "understand" English but fear speaking it because they don't want to make mistakes. This blocks smooth communication among English-speakers and those who don't speak English fluently. This is especially true in the context of team meetings and other situations where employees are expected to make suggestions. In such cases, learners still tend to rely on "interpeters" or keep quiet.

A review of shop-floor documents indicates that, ideally, all employees would be able to fill out forms (e.g., "Failed Material Report"). However, many employees don't do so, and the company appears to "work around" this fact. This suggests that (1) it is not very important to collect the information asked for on the form, or (2) the information is actually collected in other ways, instead.

Similarly, employees are provided with written instructions (e.g., Guidelines for the Ragen Assembly), but it is not clear to what extent employees really have to read those instructions. Again, this suggests that (1) the information on the guidelines is not very important, (2) employees already know the information, or (3) employees get the information through trial and error or oral instructions from co-workers.

Other forms used appear to require very little knowledge of English per se. Employees appear to need to be able to copy part names and numbers off another label and write in quantities in appropriate boxes.

Team's responses to the above information:

- Oral communication (both listening and speaking) is particularly important at Datatec, where much day-to-day communication is done orally (i.e., not in written form). This is a need consistently identified by learners.
- But written communication (reading and writing) is also important. The team should work with the company and learners to clarify where reading and writing are really needed in the production process.
- All communication skills (speaking, listening, reading, and writing) should be taught. New class activities -- like class presentations -- will give learners practice in using many different skills at once.

Outside facilitator's interpretations and recommendations:

- As is true in many workplace education programs, there appears to be a lack of clarity among stakeholders at Datatec about specific uses of English which the program should focus on. (Most respondents said only that learners need help with "shyness" about using English.) Decisions about specific course objectives and content seem to be left in the hands of the instructor.
- This is understandable because (1) most employees have never been in the position of setting goals for an education program and (2) they are very busy with their own responsibilities.
- It is important, however, for other stakeholders -- managers, supervisors, co-workers, and learners -- to be actively involved in program goal-setting and in the monitoring of program progress.

- To do this, the planning team might expand its membership to include other people who have shown an interest in the program. They might meet periodically to give feedback on needs in the plant which the program might help with. They might also make suggestions about how the program could be improved.
- Getting other employees involved in these ways needs to be done in a cost-effective manner. Rather than ask employees to leave their jobs to attend education planning meetings, the team might hold monthly lunch get-togethers, perhaps with desserts provided by learners. This would give people an opportunity to communicate about the program while building support for it.
- Within the classroom, the instructor might use individual "portfolios" as a way of getting learners to keep track of their progress. Learners can, for example, keep samples of their written work, keep track of what they're doing for homework, note examples of how they are using English, etc. This will encourage learners to be more thoughtful about what they are doing in class.
- The team might also encourage the company to examine how they use written and oral English in communications. For example, how clearly do speakers in work meetings articulate their speech? Do they really encourage all employees to speak up, or are the ESL students assumed to not be able to contribute to the discussion? Are memos, instructions, and newsletters written clearly, with short sentences free of unnecessary jargon?

Question #2: What should the English program be trying to accomplish?

What our sources said:

Again, it is members of the evaluation team who present the most specific examples of competencies which learners need to master.

Learners generally speak in very broad terms of "improving communication" and, when probed, give a few scattered examples of instances when they might like to better use English on and off the job.

Co-workers have little to say on this question of program goals. They seem to feel left out of this discussion of what the program should be achieving.

Team's responses to the above information:

- The team was surprised -- and a bit discouraged -- that some co-workers didn't see the progress being made by learners. On the floor, co-workers frequently commend and encourage learners for their efforts to learn English.
- The team should establish a dialogue with other employees, to get their input about what the program should be achieving, help them have realistic expectations for the program, and discuss what is being -- or isn't being -- achieved. Co-workers might, for example, be invited into class, to see what is going on.
- At the same time, we need to recognize that Joy is the expert in curriculum design. She will ultimately be responsible for designing activities to meet appropriate expectations.

Outside facilitator's interpretations and recommendations:
See same section under "Question #1" above.

Question #3: What in fact is being achieved by the program? Are Datatec employees now better able to communicate in English?

What our sources said:

Learners speak in general terms of liking the program, but don't articulate specific examples of how they or the company are benefitting.

Some co-workers seem to feel that only the more-motivated participant are getting anything out of the program. These co-workers seem resentful that training resources are going to the less-motivated participants who aren't properly using them.

Other co-workers, however, feel that learners have come a long way in one year. As an example, one new co-worker gets training from learners; even if the Spanish-speakers are shy about using English with her, they give it a try anyway. This co-worker feels that learners "are doing very well. Some couldn't even say a word in English before. Now they're using sentences and having conversations."

Another co-worker said that she sees a big difference in learners' use of English on the job. ("They're using it more and more each day.") Learners are now writing information on worksheets provided by supervisor, understanding blueprints better, using copy machines, and trying other machines. Some learners are now also relating better to their children's schoolwork.

This same co-worker noted that now learners are correcting her (in a friendly way) when she uses slang. This and the fact that learners now talk with her about their kids and other personal matters have led to improved communication and morale between the learners and this co-worker.

Team's responses to the above information:

- Those involved in the program -- directly (e.g., learners) and indirectly (e.g., co-workers) often are not clear about what is being achieved. Sometimes the negative observations of a few co-workers push others to ignore the positive results of the program.
- To help learners clarify what they are achieving -- and might achieve -- they might practice articulating what they think the purpose of an activity is and then assessing what in fact they've achieved. The program might also develop some kind of "tests" which enable learners to see what they are in fact achieving and where they need more work.
- Similarly, new activities might be instituted to enable co-workers to understand the program -- and perhaps contribute to it rather than just criticize it. For example, co-workers might sit down with learners at lunch and help them speak English. This could be part of a "language mentoring system" in which learners are paired with co-workers willing to volunteer to help learners develop their English skills. (Patty will seek volunteers to serve as "language mentors." As a class activity, learners can prepare guidelines for mentors, showing them how they can help by, for example, "correcting" learners in a polite, constructive way.)
- Sometimes learners are in fact developing their skills, but are afraid to risk embarrassing themselves by making mistakes in front of co-workers. This suggests that the level of trust among employees is not as strong as it should be.

Outside facilitator's interpretations and recommendations:

- Communication is a two-way street, requiring respect, listening, patience, clarity by all parties. At Datatec, part of the communication problem might be an insensitivity to learners' fear of embarrassment -- or to outright hostility from certain co-workers. The team might delicately raise the question with both learners and other employees of "How do we ensure trust between ESL students and other employees?"

Question #4: What factors are contributing to the program's success? What factors are inhibiting progress?

What our sources said:

Positive factors

Learners cite:

- A dedicated, helpful teacher
- Relevant learning activities (e.g., dictation, asking for clarification)
- Supportive co-workers

Co-workers cite:

- Commitment (a "desire to excel") and hard work (a "work ethic") by motivated learners, willingness to try even if they are "shy."
- Focus on the basic skills which learners need
- A good teacher who is continually introducing new learning activities (e.g., having learners write out "catches" for the company newsletter in which they "catch" (recognize) co-workers for doing a good job; or practicing explaining various job tasks like cleaning one's eyes in case of an accident, use of flammable materials or new machines) to make the program relevant. Teacher is "on target" in terms of identifying important tasks to focus on and encouraging learners to use English with co-workers.
- A work environment and job-rotation policy which encourage all employees to try new things, to get outside traditional "narrow" roles of doing only one thing all day long.

- Those co-workers who are sensitive to the special needs of limited-English-proficient people. For some coworkers, that sensitivity comes from having worked or lived with non-English-speakers before, or from perhaps previously lived as a minority or foreigner in another culture.
- Co-workers who take the time to ask learners to explain what they're learning in class and to ask them about their kids and other personal interests.

Team members cite:

- When participants get opportunities to try new jobs, they feel more motivated to learn.

Negative factors

Learners cite:

- Not enough time for class
- Other responsibilities (commuting, family, other jobs) which make it difficult to study outside class

Co-workers cite:

- Some participants don't try, don't take program seriously (e.g., don't study, copy homework, use class as "a coffee break.")
- Co-workers don't know what program's goals are or what's being achieved.
- After class, participants return to job, continue to speak Spanish, and don't understand English-speaking co-workers.
- Not enough testing or homework is done. Standards are too weak.
- Funds are going to support classes for unmotivated workers. Resources should instead go to training and other benefits for motivated ones.
- Sometimes when group leaders leave floor to go to class, others who rely on that leader have trouble.

Team members cite:

- Participants' over-reliance on Spanish dimishes team spirit.
- Some learners are content with current position, don't see class as means to promotion, are thus less motivated.
- Some English-speaking co-workers have low expectations of Spanish speakers, don't expect them to use English or try for promotions.
- Some Spanish-speakers have low expectations of themselves, don't think of themselves as capable of speaking English.

- Some participants have more formal education than others. Others then have lower expectations of less-educated participants.
- Participants don't get raises, even when they do a good job and train new co-workers. Opportunities for promotion are limited. Recognition in newsletter is not enough to motivate learners.
- Participants are told not to complain about problems at work on grounds that they are being given an English class.
- Too much emphasis on evaluating employees can lead to conflict, diminish team spirit.
- Americans tend to not understand the difficulties faced by someone with limited English skills.
- However, some co-workers do want to try to comunicate with Spanish-speakers, but -- if they can't understand what the Spanish-speakers are saying -- they find it awkward to have to ask the Spanish-speakers to repeat the same thing several times.

Team's responses to the above information:

- There was general agreement within the team that "low expectations," "cultural differences," and "lack of seriousness" are potential obstacles to meeting program goals:

Low expectations:

Several team members agreed that some learners have low expectations of themselves. This is a barrier to learning. These "low expectations of self" are another way of saying "low self-esteem" or "low self-confidence."

Cultural differences:

It appears that we need to focus more on cultural issues which block a sense of being part of the Datatec family. Immigrant employees seem to have a sense of separation from other employees. (One example: Few immigrant employees participate in company's overnight teamwork sessions at Frost Valley.)

Maybe one reason for this is that traditional Latin American culture doesn't encourage women to step outside traditional roles. (For example, few husbands would allow their wives to go someplace overnight with co-workers.)

The structure of the Frost Valley event doesn't allow full participation by all employees. A possible action: Ask the learners to suggest actions which might enable/encourage learners to participate more actively in company activities.

If this could be done, it would get at the trust issue referred to earlier.

Lack of seriousness:

If in fact some learners don't take the program seriously enough, then this needs to be dealt with. Is it true? If so, why? And what can be done about it?

If learners don't try, they might be asked to leave the program.

- One team member questioned the comment suggesting that employees who do a good job aren't given proper incentives/rewards.
- Another questioned why someone would raise the issue of how much education learners have. That is not relevant to this discussion, she felt.

Outside facilitator's interpretations and recommendations:

- While some employees might have "low expectations of themselves," this low self-confidence might be reinforced by co-workers or other factors which convey the message that the learner isn't really expected to change or improve very much.
- While some learners might not take the program very seriously, it could be that some co-workers don't take the program seriously either.
- The team might deal with these problems by stressing the importance not only of the learners in the program but of co-workers as valuable resources. The team might also take the lead in promoting the value of education. This might be done through buttons ("I'm improving my skills." "Speak to me in English."), posters, articles in the newsletter (including articles written by learners or interviews with learners, evaluation team members, and other supporters of the program), etc.
- The company also needs to recognize that cultural differences might be the source of many problems currently blamed on lack of English skills. These cultural differences might be brought out in the open in classroom dicussions and through projects in which learners interview co-workers in ways which would make cultural differences more explicit.

Question #5: Should the program continue?

What our sources said:

What learners said:

"Yes," program should continue.

What co-workers said:

Three co-workers said that program should continue, but only if stricter standards are instituted to ensure that (1) only those capable of learning are admitted, and (2) participants are committed and do the work necessary to succeed. These standards could be enforced through "testing" and a stricter homework policy. If those changes aren't instituted, training resources should be re-targeted to other employees who show proper motivation.

Three other co-workers said without reservation that the program should continue.

Team's responses to the above information:

- Assuming that the program continues, steps need to be taken to see that the above concerns are dealt with. These include:

  -- Employees should be warned to take the program seriously.
  -- People have to find the time to practice or they won't progress. (The class should discuss how important it is to practice.)
  -- The program needs to "put our foot down" and be strict about homework.
  -- All stakeholders need to keep in mind that all learners have the capability to learn. Motivation, instruction, and materials are factors which determine program success.

- In addition to trying to respond to problems identified in the data, we need to recognize positive factors and build on them. For example, the team now sees more motivation among learners in recent months. Over-emphasizing the negative comments of some of our sources could be discouraging to those trying to make the program succeed.

Outside facilitator's interpretations and recommendations:

See this section under "Question #6" below.

Question #6: If the program continues, what steps need to be taken – and by whom – to help achieve the program's goals?

What our sources said:

What learners said:
- Provide more time for classes.
- Find out from learners what activities they like (e.g., dictation) and eliminate less-interesting activities.
- Recognize that learners lead busy lives outside Datatec and therefore have limited time for extra study.
- Learners are willing to continue classes on their break times, if that is what is necessary.
- Co-workers should continue to pay attention to learners, explain things clearly, and help them with English.

What co-workers said:
- Have stricter standards (e.g., use tests) to determine who gets into and stays in the class. Be sure that all participants are "capable of learning," and weed out those who don't try (e.g., via a "pass/fail" policy).
- The State should be more careful about how its funds are spent and demand that programs meet certain standards. (Note: Larry Tourjee points out that Datatec is the only funder for this program. It receives no government money of any kind.)
- Provide training to other workers, too.
- See that participants do homework, don't copy from each other.
- Keep co-workers informed about program goals and activities.
- Current participants might identify others who should participate.
- Participants need to try to use the English being taught in the classes. Perhaps they need to be paired with non-English-speaking co-workers.
- Have classes focus on dialogues, interviews, and other activities which teach the skills the participants actually need.
- Encourage learners to use ESL tapes at home and participate in adult education classes, to reinforce what is being learned in the class.

- English-speaking co-workers should help learners, not make them feel uncomfortable by being impatient. One co-worker said: "If you are mean to a child, she'll avoid you. If you're nice, she'll come to you." Another said: "I used to laugh when one of them made a mistake in English. Now I won't laugh, just smile."
- Co-workers can encourage Spanish-speakers to "speak English!" in a fun -- not intimidating -- way. For example, tell them with a smile "I want to understand your gossip!"
- American co-workers should recognize that limited-English-proficient employees can progress tremendously if given the chance. The learners are hardworking, eager to learn, and want the chance to learn.

Team's responses to the above information:

- The program needs to encourage active participation by all learners. Some possible ways of doing so:
  - -- Institute a pass/fail system.
  - -- Get co-workers more involved in the program, so they will understand it and support learners. Show co-workers how to give constructive feedback to learners.
  - -- Consider re-arranging work assignments, to encourage more communication between English-speakers and Spanish-speakers.
  - -- Develop interesting projects for learners to do outside class. This will enable them to get the practice they need and to see the relevance of what they are doing in class. As a class activity, learners can keep track of the homework they are doing as an indicator of progress.
  - -- Recognize learners and the instructor for the good work they are doing. Find ways to communicate information about program goals, activities, needs, and accomplishments to other employees.
  - -- Deal with the negative comments raised by some co-workers, so that they don't create bad feelings.
  - -- Consider allowing more time for class. 1.5 hours per week is a small amount of time.

- Other stakeholders need to re-examine the role of the ESL program and attitudes toward cultural difference. The program should be seen not just as an isolated effort to "teach English" to a few workers. Rather, stakeholders should seeit as part of a larger effort to facilitate communication and active involvement among all employees. This communication is being blocked not only by a lack of English skills among some workers but by an inability by many employees to understand and deal with cultural differences.

For example, some English-speaking employees don't understand why -- after a year or so of classes -- some employees still speak Spanish inthe halls. This might not be a sign that Spanish-speakers can't use English or that the ESL program is a failure. Rather, it might simply be an efficient way of communicating for those particular employees.

Stakeholders need to clarify their expectations for the ESL program, so the program is not being expected to change deep-seated attitudes and communication patterns beyond the control of the program.

Stakeholders should consider that, just as the company has been transforming itself technologically, it might have to transform how its "culture" handles the diversity of its workforce, as well.

- Other stakeholders need to make efforts to communicate openly with Spanish-speakers, as well as vice versa. This might be done through a proposed "mentoring" program which pairs English-speakers with Spanish-speakers as "buddies." To make a mentoring program work, however, mentors need guidance in what they should do.

- Other stakeholders should also be aware that, during the past few months, the program instructor has made several significant changes in curriculum, assessment, and communications with other stakeholders. These changes were made in part due to feedback received during this evaluation. These changes include:

  Curriculum: Extra efforts are being made to focus instruction on job-related uses of Egnlish identified as relevant by learners and other stakeholders.

  Assessment: The instructor has introduced a "portfolio" assessment system in which learners -- with help from the teacher -- keep track of their progress toward specific learning goals. The instructor, in turn, shares summaries of that progress with management on a regular basis.

  Communications with other stakeholders: The instructor has been giving regular progress reports to management and soliciting input from them. She is also reaching out to other co-workers, inviting them to get involved in the program by serving as language mentors. The planning team is also considering inviting other co-workers to be part of the team.

Outside facilitator's interpretations and recommendations:

The preceding comments from learners, co-workers, and planning team members are a mixture of praise, creative ideas, constructive criticisms, and complaints. The team needs to sift through these ideas, acknowledge legitimate concerns, and take needed actions.

In summary, the team might take the following positive actions:

Build stronger partnership and communication among all stakeholders.

The team should develop ways to regularly get input, feedback, and support from management, co-workers, and learners. By so doing, these various stakeholders can clarify what they expect the program to achieve, whether the program is on target, and how to improve it.

Possible ways of improving communication include:

- Expand the number of stakeholders on the planning team. The team might include 1-2 supervisors or other co-workers, and another 1-2 managers in charge of quality and/or personnel issues. These people need not attend every team meeting, but be available to clarify questions which might arise in team meetings. For example, when setting program goals, the team might want a clearer idea of how education fits into the company's "quality" program. Supervisors might provide specific examples of communication problems which the program might help with. Or learners might have questions about about benefits available to them.
- Host periodic "open houses" in which co-workers are invited to sit in on class, hear reports from learners, respond to questions from learners, etc.
- Establish a "language mentoring" program in which interested co-workers are matched with one or more

learners to provide feedback, explain procedures or vocabulary, etc.

- Publish newsletter articles about the program. The learners and instructor might write their own articles for the company newsletter. Or the newsletter editor might profile individual learners or describe class projects. This would clarify to other employees what is happening in the program. Alternatively, the class might compile their own collection of articles, "action plans," autobiographies, etc. for dissemination within the plant.
- Deal explicitly with the "trust" issue. As a class exercise, raise the question of "trust." That is, why is trust important for all employees? What inhibits trust among co-workers? How can trust be fostered, so that learners feel confident about trying to use English?
- Deal explicitly with possible co-worker resentment. Feedback from some co-workers suggests that some might in some way resent the ESL program and/or some learners. The team might open up a dialogue with co-workers around this issue, to deal with it directly. For example, in a meeting with co-workers, the team might ask whether some co-workers feel resentful. If so, why? What might be done about it -- and by whom?
- Deal explicitly with cultural differences which might inhibit communication and teamwork. The team should consider to what degree differences between learners' culture and that of other co-workers might block communication and cooperation within the plant. If such differences are identified by the team, they might be dealt with in classroom activities, in discussions with co-workers, by revising certain plant activities (e.g., Frost Valley, how learners are treated in teams, etc.) Perhaps learners can delegate one or more of their fellow learners to serve as "cultural ambassadors" to the rest of the workforce. The "language mentors" mentioned above might play a similar role of facilitating communication between learners and co-workers.

Clarify expectations and monitor progress.

The above activities should help all stakeholders clarify expectations for the project. Other ways of doing so might include:

- Establish a portfolio assessment system in which learners work with the instructor to continually clarify goals and, in various ways, document progress toward those goals.
- Demonstrate results in a clear, quantified, graphic way. Where possible, document learner progress toward goals in charts or other graphic forms familiar to Datatec co-workers.
- Analyze what role communication plays in the plant. The team might conduct an organizational needs analysis to clarify what activities really require reading, writing, listening, and speaking skills. This analysis should also analyze written materials used in the plant, to clarify how they might be written more clearly to make them more accessible to learners and other employees. This would help the team clarify to what extent communication is blocked by learners' English skills or by other factors like poorly-run meetings, poorly-written documents, etc.
- With input from learners and other stakeholders, establish a set of "ground rules" or guidelines which all learners need to abide by. These might include doing homework, regular attendance, showing progress, etc. Learners should then formally agree to abide by those rules via a learning contract.
- Establish a fair set of guidelines for clear communication and teamwork. With input from learners, the team might prepare a set of guidelines for using English in the plant. Guidelines might emphasize the links between clear communication, teamwork, and quality. For example, they might go something like this:

> "Datatec emphasizes quality work in a team environment. Clear communication is key to making this work. All employees should use English to communicate with co-workers in a clear way, to identify problems, and jointly solve them. Communication and teamwork are two-way streets, requiring respect and extra effort to speak and write clearly and to listen carefully . . . "

Revise curriculum content.

Revise the curriculum to focus more directly on competencies and activities identified as important in the above goal-clarification activities. This might include asking learners and co-workers to identify issues they are most concerned about (in the plant or outside). Learners can then draw up action plans analyzing the problems and recommending possible solutions.

Consider altering schedule of learning activities.

The team should consider whether it is necessary, desirable, and feasible to expand or otherwise change the scheduling of classes. Note that many learners asked for more class time. Can this be done in ways that are not disruptive to production schedules?

The team should also re-think how learners might be given opportunities to practice their skills outside the classroom. They might, for example, be given assignments to do on the job or after work. They might also be referred to other eductional programs, TV shows, reading materials, etc. which they could use outside work to meet their learning objectives.

TEAM EVALUATION AT THE HAARTZ CORPORATION: A CASE STUDY FROM A WORKPLACE EDUCATION PROGRAM

Prepared
by
Laura Sperazi

One of seven case studies in
"Team Evaluation:
Case Studies from Seven Workplace Education Programs,"
a report prepared in June 1994
by Laura Sperazi and Paul Jurmo

THE HAARTZ CORPORATION

Acton, Massachusetts

I. PROGRAM BACKGROUND

Program history

The Haartz Corporation is a small (250 employees) manufacturer of custom, vinyl-coated, commercial upholstery fabrics. These fabrics are purchased by manufacturers of cars and boats and installed in vehicles that are sold worldwide. Like most small businesses, Haartz has been trying to keep production costs down while it improves product quality. The reliable quality of its products and its ability to respond quickly to custom orders keep this energetic company at the center of its industry.

A few years ago, the President of the company and other managers began to see the need to provide basic education support to some workers. The changes in production technology and organization of work that were contributing to the company's success in the marketplace were also highlighting another reality: a significant number of workers could not master the new production technologies and work structures because their basic English language and math skills needed improvement. The new work structures which highlighted the need for workers to improve their skills include: working in teams, emphasizing creative problem solving at each phase of work, creating flexible job roles, implementing statistical process control measures, and becoming generally oriented to quality management.

The Haartz Corporation is an unusual company. It is small, family-owned, profitable, and managed by a young man in his late thirties whose father and uncles ran the business before him. This young President and other managers like him have succeeded in making team management, collective problem solving, and flexibility more than slogans. Employees are motivated to learn and to change because they are invested in the success of the business of which they feel themselves to be a valued part. While there are acknowledged problems with the quality of work some employees can produce because of their limited skills, the general attitude toward employees is not condescending but supportive. The cultural message in this organization is that education will help employees in their own lives and it will help the business -- in whose profits the employees share.

Program goals

The team enjoyed the luxury of a six-month planning period before conducting classes. During this time the team worked hard to understand exactly what their basic skills program should achieve. The Program Coordinator was familiar with the SCANS Report and other reports like it which suggest that American business needs to reorganize itself by, in part, training workers to become more flexible and multi-skilled. As a result, the team began to align the goals and practices of the basic skills program with the mission statement of the company -- and actually rewrote that company mission statement in response to the new thinking which the basic skills program provoked.

When the evaluation facilitator joined the team, she encouraged team members to further review the program's goals from the perspectives of the workers, the company, and the program itself, and to pay attention to the similarities and differences among those goals. The charts on pages 9-13 document several iterations of program goals and indicators which the team produced.

Description of Program

With assistance from a grant through the Massachusetts Workplace Education Initiative and the National Workplace Literacy Program, the Haartz Corporation offered language arts and math instruction to about 50 employees over an 18-month period from July 1992 to December 1993. After the initial planning period of six months, classes were offered in twelve-week cycles. Two math and two language arts classes -- all an hour and a half in duration -- were offered in each cycle and scheduled morning, midday, late afternoon, and night so that employees from all shifts could attend. Employees received full release time from work to attend classes. Employees were enrolled in only one course at a time.

The Haartz Corporation's educational partner in basic skills education is the Acton Public Schools/Acton-Boxborough Regional

School District. Since January 1994 the company has been supporting the basic skills program with its own fund.

In addition to providing basic skills education, the Haartz Corporation also provided GED instruction to twelve employees during the second half of the grant period. These services were not directly tied to the grant but grew out of an increasing recognition of a need for them as the math and language arts classes became more popular. The company soon made a special arrangement with Mt. Wachusett Community College and the Commonwealth of Massachusetts GED Program Office to become an official GED test site. This made it possible for the twelve candidates for the GED to take the test in their own company. This was a strong symbol of the workplace becoming a learning place.

II. BACKGROUND ON THE TEAM

History of the team

As required by the Massachusetts Workplace Education Initiative (MWEI), the Program Coordinator convened a Planning and Evaluation Team composed of representative stakeholders in the summer of 1992. The MWEI required all its 1992-93 funded programs to convene such teams and to follow a planning and evaluation process virtually identical to the process being piloted in this National Institute for Literacy (NIFL) project.

The reason for this overlap is that the evaluation model being piloted under this NIFL project grew out of work done in Massachusetts. The MWEI pursued its work in team-based evaluation on a parallel path to the work being done for NIFL. Rather than present a conflict, this convergence of interests created an opportunity for the evaluation facilitator to conduct her work in a program already required to conduct evaluation activities with a team. The facilitator was able to provide guidance in evaluation to the Haartz team (in addition to the support it received through its participation in the MWEI) for about nine months, and to document the work for the purposes of this case study.

Stakeholders represented on the team

The Haartz Planning and Evaluation Team included:

- Eric Haartz, President, the Haartz Corporation
- Doug Seibert, Plant Manager
- Fred Carley, Quality Control Specialist, On-site Coordinator
- Mike Krupski, Supervisor
- Nelson Purdue, Supervisor
- George Pickles, Employee
- Rodney Goguen, Employee
- Russel Tysinger, Employee who replaced George Pickles and Rodney Goguen
- Arthur Goodall, Program Coordinator, the Acton Public Schools/Acton-Boxborough Regional School District.
- Jane Goodall, English Instructor, the Acton Public Schools/Acton-Boxborough Regional School District.
- Ken Russell, Math Instructor and Haartz Extern

Note that not all members of the team attended each meeting. The "core team" (especially toward the end of the evaluation period) was composed of Fred Carley, Art Goodall, Jane Goodall, Ken Russell, and Russel Tysinger. Eric Haartz attended more than half of the meetings.

III. THE PROCESS WHICH THE TEAM WENT THROUGH

Summary: Between December 15, 1992 and August 30, 1993 the facilitator met with the Haartz team approximately twice per month for a total of 16 meetings. Each meeting ran for about two hours. Team members often discussed other business before getting down to the work of the evaluation. This helped the evaluator to become "situated" in the program and to get to know key team members in their program-related roles. In addition, the facilitator communicated frequently with team members by phone -- especially the Program Coordinator and the On-site Coordinator-- and met and talked with team members at several conferences on workplace education.

After clarifying its program goals, the team chose to focus its evaluation on whether the basic skills program was improving the communication skills of workers enrolled in the program. It did so after long and interesting discussions about the relative merits of focusing an evaluation on formative versus summative questions.

After deciding that it would focus on the improved communication skills of enrolled employees, the team spent several meetings identifying the varied indicators of improved communication skills at the Haartz Corporation. It planned to evaluate improved communication skills through several measures:

- a pre-post survey administered to students
- a student focus group
- a supervisor focus group
- a program log
- informal feedback from the Haartz community

Other goals were also evaluated through these and other measures, as indicated in the Goals Matrix on pages 27-28.

Phase 1: Preparing the team

Initial preparations

As mentioned, the Haartz Corporation workplace education program was part of the Massachusetts Workplace Education Initiative (MWEI). MWEI staff prepared its member programs for team-based evaluation through a three-hour orientation. When Laura Sperazi joined the Haartz team as evaluation facilitator, members were ready to work, although they were somewhat wary about the amount of time that a team-based evaluation might take. The Haartz Corporation had also made several trainings in teamwork available to supervisors early in the grant period. Supervisors on the team had participated in this training. Overall, the Haartz Planning and Evaluation Team was well-prepared to work as a team.

Organizing the evaluation team

The evaluation facilitator did not have to organize the team. It was in place when she began her work with the company. It had been convened according to MWEI guidelines which required the representation of all stakeholders. However, the evaluation facilitator encouraged the participation of additional workers who were enrolled in the program.

Phase II: Planning the evaluation

It took roughly three months for the team to plan its evaluation. During that time it reviewed its goals and discussed the relative merits of focusing on formative versus summative questions.

Haartz is a quality-oriented company. It is committed to producing the best-quality products possible. The company follows the general quality directive (promoted by Edward Deming) that, as long as manufacturing processes are operating within quality range, there is no great need to focus excessively on the quality of your outcomes. In other words, quality outcomes are inherent in quality processes. Quality processes guarantee quality products. Because this orientation to creating a quality product works for manufacturing at Haartz, it made sense that the team would examine its education program -- its educational product, if you will -- in the same way.

The question thus facing the team was: Does the team have to concern itself with measuring outcomes? Or, if members were clear about the outcomes they wanted to achieve, could they focus simply on their "processes," on making a better and better program? This leaning toward an exclusively process-oriented evaluation was reinforced by the amount of anecdotal summative information about students' achievements that circulated throughout the organization. There was a sense that everyone, including supervisors, knew enough about what the program was achieving. They wanted to maximize the achievements by concentrating on making a better and better program.

The team came very close to dismissing formal summative evaluation activities. In the end, however, some more-traditional pressure to demonstrate what the program was accomplishing won out. This happened in part because the company would be required to demonstrate more frequently to its customers exactly what its quality management and other training programs were achieving.

The team received additional evaluation support from three sources:

First, selected team members met with members of two other evaluation teams (from Bull Worldwide Information Systems' Brighton Plant and the Norton Company in Worcester, Massachusetts) to share ideas about how to focus an evaluation of a workplace education program.

Second, anticipating the need to present the results of their evaluation in statistical form, selected members participated in a day-long training on the use of the Statistical Package for the Social Sciences (SPSS), a database program.

Third, the team received technical assistance on survey design from Donald Cichon of Donald Cichon Associates. The team wanted the survey to present simple and easy-to-read graphic representation of items. The team settled on a format that is more graphic than most surveys.

Clarifying program goals and the information to look for

Over the course of approximately four meetings, the team discussed and refined its overall goals, chose one goal to evaluate (improved communication skills), and specified about twenty indicators of that goal. The facilitator led the team activities in these meetings by (1) suggesting that goals be articulated from the perspectives of different stakeholders; (2) clarifying the differences between goals and indicators; and (3) providing the team with ample opportunity to brainstorm and discuss possible goals and indicators.

As mentioned, the team had been working on its goals for some time; their work with the facilitator built on that foundation.

It is also important to clarify that the team did not hesitate to hold students in the math class acountable to the goal of improved communication skills, in the same way that students that in the language arts class would be. Although the content of one course was math, the team fully expected -- and the instructor was confident -- that the math students should be evaluated on their communication skills. Focus group results confirmed the communication skills which students learned in the math class. (See below, pages 17-22.)

The following charts present the goals for the Haartz program and the indicators of improved communication skills. Although somewhat lengthy taken as a whole, the charts render an interesting picture of the sometimes circuitous process which a team must go through in order to identify meaningful and representative goals and accurate indicators.

(Please note that in Chart #2 and Chart #3 "indicators" sometimes are actual indicators and sometimes are possible "measures" of the stated goal. Chart #4 lists only indicators for the goal "improved communication skills.")

The Haartz Corporation Mission

The mission of The Haartz Corporation is to continually improve our ability to make coated fabrics and to provide superior service to our customers.

The Haartz Corporation Objectives And Goals

To ensure that continuous improvement is a top priority of all employees.

To provide training of all types to all employees.

To use performance appraisals where possible.

To provide a healthy, safe workplace for all personnel.

To ensure that the plant is kept clean and that all equipment is properly maintained.

To be responsive to our customers" needs and to sell our products at a competitive price.

To continue our research and development efforts and invest in "state-of-the-art" production equipment.

To keep the air free from pollutants and odors that could be harmful to the community.

To ensure that all employees understand and use Statistical Process Control.

To provide job descriptions for all employees.

To provide benefits to all employees that are fair.

To promote from within the company whenever possible.

To conduct supplier evaluations on a regular basis.

To maintain our position as a leader in the coating industry.

To strive to eliminate non value-added operations.

The Haartz Workplace Education Goals from Three Perspectives

9.

Organization Goals

- Increase skill level of students
- Improve communication including with supervisors
- Improve productivity
- Improve self-confidence
- Improve problem-solving skills with students so as to encourage their coming forward with solutions
- Vertical/Horizontal team-building and problem-solving
- Use program as stepping stone for future long-term of all employees having a minimum of a high school diploma or GED certificate
- Establish within the culture of Haartz Corporation a dynamically evolving philosophy of life-long learning

Student/Employee Goals

- Improve self-confidence of students to make better employees
- Improve communication
- Additional goals as communicated by students to Ken and Meagan encouraging student feedback
- Student satisfaction

Program Goals

- Viewing student as "customer," we want to offer them a high quality product
- Use "scans" competencies and foundation skills to create contextualized curriculum tailored to the educational needs of Haartz
- Allow for personal growth and development of employees by enhancing ability to perform and build confidence through workplace literacy
- Make life-long learners of students
- Provide feedback to Dept. of Education's office of Adult Basic Education in terms of start-up procedures and curriculum building
- Build program based on student input (classroom feedback and talk on shop floor)
- Use experience gained from Phase I Program to make this program effective and efficient

Chart #2: Haartz Corporation Basic Skills Program Goals and Indicators by Program/Employee/Organization: First Iteration

Program Goals	Indicators of Goal Attainment
I. Viewing student as "Customer," we want to offer them a high quality product.	Student satisfaction with course and self-performance. "Customer" desire to continue using product.
II. Use "SCANS" competencies and foundation skills to create curriculum tailored to needs.	
III. Allow for personal growth and development of employees by enhancing ability to perform and build confidence.	Demonstrated ability and desire to improve job status.
IV. Make life-long learners of students.	Student desire to continue education, in-house and/or outside.
V. Provide feedback to DOE Office of ABE in terms of start-up procedures and curriculum building.	Complete instructor notes and lesson plans along with comments and recommendations.
VI. Build program based on student input (classroom feedback and talk on shop floor).	Student satisfaction that course is tailored to needs and capability. Student sense of accomplishment.
Use experience gained from Phase I of program to make this program effective and efficient.	

Student/Employee Goals	Indicators of Goal Attainment
I. Improve self-confidence of students to make better employees.	Mid-course and post-course critiques. Supervisor evaluation.
II. Improve communications.	More active involvement in discussion. and presenting ideas. Supervisor evaluation.
III. Additional goals as communicated by students to instructors.	Mid-course and post-course critique. Problems brought to class as being of interest to students.
IV. Student satisfaction.	Mid-course and post-course critiques. Improved performance. Students spreading word of how helpful course is.

Chart #2: Haartz Corporation Basic Skills Program Goals and Indicators by Program/Worker/Organization: First Iteration (cont'd)

Organization Goals	Indicators of Goal Attainment
I. Increase skill level of students.	Direct measure of performance in subject being taught. Subjective measure of daily performance by supervisor. Performance evaluation interview. End-of-course critique.
II. Improve communications, including with supervisors.	Direct measure of performance in class. Subjective measure of daily performance by supervisor. Performance evaluation interview. End-of-course critique.
III. Improve productivity.	Supervisor evaluation.
IV. Improve self-confidence.	Student self-evaluation. Supervisor evaluation. End-of-course critique.
V. Improve problem-solving skills with students to encourage their coming forward with solutions.	Student self-evaluation. End-of-course critique. Supervisor evaluation.
VI. Vertical/Horizontal team-building and problem solving.	Supervisor evaluation.
VII. Use program as stepping stone to establish GED attainment program.	GED attainment statistics. Percent of employees with H/S diploma or GED.
VIII. Establish within the culture of Haartz Corp. a dynamically evolving philosophy of life-long learning.	Employee response to continuing program with more diversified subjects. Employee interest in continuing education outside workplace.

Chart #3: Haartz Corporation Workplace Education Goals and Indicators: Final Iteration

Program Goals	Indicators of Goal Attainment
• Viewing student as "customer," we want to offer them a high product	• Student satisfaction with course and self-performance • "Customer" desire to continue using product
Organization Goals	Indicators of Goal Attainment
• To improve problem-solving and communication skills with students to encourage their coming forward with solution	• Student self-evaluation • End of course critique • Supervisor evaluation • Increase in constructive suggestions
• To support and enhance Vertical/ Horizontal team concept	• Supervisor evaluation • Team performance improvement • Enhancement of team concept
• To establish within the culture of Haartz Corporation a dynamically evolving philosophy of life-long learning and to create a bridge to other programs such as GED	• Employee response to continuing program with more diversified subjects • Employee interest in continuing education outside workplace

Chart #4: Indicators of Improved Communication

1. Speaks up in meetings.
2. Says what is really on his/her mind in meetings.
3. Uses technical words when s/he needs to.
4. Makes suggestions about how to improve how work is done
5. Asks his/her supervisors questions when s/he needs to.
6. Asks the people s/he works with questions when s/he needs to.
7. Talks to his/her supervisors with confidence.
8. Lets supervisors know that s/he has important skills which s/he is ready to use.
9. His/her supervisors understand him/her when s/he talks to them.
10. The people s/he works with understand him/her when s/he talks to them.
11. Talks with his/her supervisors about ideas that improve quality.
12. Talks with people s/he works with about ideas that improve quality, such as better instructions for Standard Operating Procedures.
13. His/her supervisors let him/her know s/he has good ideas.
14. The people he/she works with let him/her know he/she has good ideas.
15. Reads job instructions.
16. Reads safety procedures.
17. Reads bulletin boards.
18. Works well with other people on the floor.
19. Offers help to his/her supervisors.
20. Offers help to people s/he works with.
21. Teaches new workers about how the workplace runs.
22. Uses the information on the floor (i.e. computer printouts, memos, etc.) to improve how s/he does his/her work.

Note: See Goals Matrix on pages 27-28 for summary of goals and evaluation results.

Phase III: Gathering, organizing, analyzing, and reporting the information

Gathering and organizing the data

The evaluation facilitator worked with the team to gather and organize its information, using the following activities:

- **Pre-Post Student Survey.** With input from the team, the evaluation facilitator developed a draft pre/post survey to collect information on improved communication skills. The team revised the instrument. Then the evaluator drafted a new version. This process was repeated four times before the survey was put into final form.

  The survey has twenty-six items; four are demographic and the rest are indicators of improved communication. Each item offers the student a choice of one of five answers (i.e., not at all; sometimes; a lot; always; does not apply) with corresponding bar-graph-type representations. At the end of each item, the student is invited to comment in writing on the question asked/answer given. The evaluation facilitator also drafted a version of this survey for use with students who had not taken the survey as a pretest. This version asked students to assess each item twice -- once for before they began the program and again for after the program. (See Appendices A and B.)

  The Program Coordinator piloted the survey with two students for content validity and reliability. (See Appendix C.) Teachers administered the survey in class. The evaluation facilitator reviewed and organized the raw data.

- **Focus Group.** The evaluation facilitator and the Program Coordinator developed questions for the focus group for workers who were participants in the program, and then conducted the focus group together. The evaluation facilitator wrote up the results of the focus group. (See Appendix D.)

- **"Math Midcourse Critique."** The math instructor developed and administered the "Math Midcourse Critique." This written feedback sheet is composed of eight multiple-choice questions which assess how well the students feel the course is going for them: speed of the course; clarity of instruction; quality of the materials, usefulness of what is being taught, etc. There is space for comments at the bottom of the survey.

The math instructor administered the "critique" in class in order to gather feedback from students about what they liked and did not like in class. It was intended to be an anonymous, quick, and easy check on "customer satisfaction" whose results could be tallied without having to analyze narrative answers to many open-ended questions. (See Appendix E.)

- **The Program Log.** The evaluation facilitator provided guidelines to the On-site Coordinator about how to keep a program log that would provide documentation -- become a compendium -- of the rich, oral, anecdotal information about the program that flowed freely throughout the organization. The On-site Coordinator was responsible for implementing the program log.

A program log is a book or folder where ideas and stories about a workplace education program can be recorded, preserved, and then reviewed. The log is the journal of the program, kept collectively by students in the program, workers who are not students in the program, teachers, supervisors, managers, administrators -- anyone who cares enough to think about the program and have an idea worth putting down on paper. The purpose of keeping such a log is to preserve valuable information that might otherwise get lost. The log is a continuous improvement tool. It is the record of the program's "production." After you review the production record, you are better informed to make decisions about how to improve operations.

A team member (usually but not necessarily a teacher) is responsible for reviewing the log, taking the log to team meetings, and reporting interesting findings to other team members. Every few months the "keeper of the log" writes a brief summary of what has been recorded in the log, and this report, in turn, becomes part of the log. Program staff, team members, and others should be able to review a year's activity fairly easily this way, once the system gets going.

- **Supervisor Focus Group.** The team generally agreed that a supervisor focus group would be an important complement to the worker focus group. However, there was also concern about taking supervisors away from work for an hour, especially when some of the supervisors were already freely sharing their opinions about the program either in team meetings, in their own meetings, or in conversation with each other and other managers.

The team did not convene this group during the time the facilitator worked with it.

- **Newsletter Articles.** The team considered regular articles or updates written about the basic skills program for the Haartz Corporation's monthly newsletter to be part of the evaluation documentation process because the articles required students -- with the support of teachers -- to think through the most important issues to communicate about their program. These "updates" keep everyone in the company informed about the program -- who is in it, what is changing, why others should join. Even in a company as enlightened as Haartz, this publicity legitimates the program and helps to diminish the stigma attached to (as a worker in the focus group said) "having to go to school now because you're a dummy." Participants in the worker focus group considered these newsletter updates very valuable. They are written by students in the program as part of a class activity.

- **The Process Evaluation.** Following a chart which lists seventeen components of a quality workplace education program and "quality indicators" for each of those components, members of the Planning and Evaluation Team attempted to set quality standards for each component of the Haartz program. (This chart of "quality indicators" was prepared by the Massachusetts Workplace Education Initiative and was based, in part, on the facilitator's early work with evaluation teams.) The team determined whether the component they were evaluating maintained a quality standard or needed to be improved. If improvement was needed, the team then identified the actions it needed to take to make that improvement. The team met with the facilitator for two meetings to complete this part of the evaluation process. (See Appendix F.)

Analyzing the data

Once the above data-gathering activities were implemented, the team analyzed the resulting information, as follows:

- **Pre-Post Survey.** For all the work that the team put into designing the pre-post communications skills survey, in its first round of use (in the second cycle of classes), it did not yield valid results. This is because students did not evaluate their communication skills objectively at the start of the class for fear of "looking bad." Although the math teacher had doubts that the pre-test data were accurate -- he suspected that the men especially were inflating their self-assessments of their communication skills because they did not want to "look bad" -- it was not until after the post-test that some of the students (and the data) confirmed his suspicions.

Many students rated their communication skills at the start of the program very high. At the end of the program they rated their skills more realistically and many overall scores showed a loss instead of an anticipated gain. The lower scores can be viewed positively as a more-honest assessment of students' communication skills rather than as a failure to achieve gain. That honest assessment means that something valuable took place both in the education process and in the evaluation process. It means that (1) students felt free to discuss the motivations of their earlier asssessments, thereby demonstraing their improved communication skills; and (2) the survey instrument registered the discrepancy between anticipated and actual results in a way that promoted critical self-reflection by all parties.

Related to survey results is the use of the database "Statistical Package for the Social Sciences" (SPSS). As mentioned earlier, training in SPSS had been provided to the team. The facilitator and team members expected that the math instructor -- who had a lot of experience with computers and statistical analysis in his prior career -- would learn SPSS and subject survey results to statistical analysis with relative ease. The math instructor had agreed to this mid-way through the evaluation process. However, a scarcity of available personal computers in the company, lingering questions about whether the small number of surveys warranted such analysis, invalid results on the first round of data collection, and the additional training the instructor needed on new personal computer systems, hampered use of SPSS.

The teachers and the students themselves knew that a great deal of learning had taken place during the second cycle of classes. The challenge was to find a format in which students could describe that change fully. The worker focus group was that format.

• **Worker Focus Group.** The purpose of the worker focus group was to elicit students' ideas and feelings about (1) what they had learned from participating in the program, with a special focus on communication skills; and (2) how the program might be improved. The group elicited very useful information about what students learned; how they learned; what they want to continue to learn; and how their learning affected how they do their jobs.

Focus group participants wholeheartedly enjoyed taking both the math and language arts classes. They especially talked about how being treated like an adult in the classroom encouraged them to become confident about learning. They specifically identified the teaching method that uses multiple strategies to solve problems as helpful to them. Through the support and ingenuity of their instructors, participants have realized that "there's more than one way to learn" and have become more familiar and comfortable with their own learning styles.

Focus group participants talked about the benefits of learning together. In class, participants become friends, and friends work together on the floor more easily and efficiently than people who are simply "coworkers." Focus group participants strongly suggested that Haartz employees who are not enrolled in the workplace education program -- foremen and supervisors as well as workers -- would benefit from exposure to the team-based learning strategies of the classroom. These include: listening well; taking people's suggestions seriously; paying attention to alternate solutions to problems; not pulling rank if someone has a hard time learning something, but being patient and supportive.

All focus group participants wanted to continue their classes. They generally agreed on the following actions which the program might take to improve itself and to become better integrated into the life of the Haartz organization:

-- Continue the workplace education program.
-- Organize a few open houses and invite foremen and supervisors to them. Do not invite foremen and supervisors into regular classes whenever they want. This would disrupt the classes.
-- Hold more-frequent focus groups -- every three months, at least, to allow for input on how the program is developing. Get all program participants involved in the focus groups -- not just a selected group.
-- Supervisors should sit in on classes from time to time to get an update on what's going on, and to offer their opinions on the class. This could be in addition to the open houses.
-- Supervisors should also have a focus group like the one held with program participants. They should have an opportunity to say what they think and learn more about the program.
-- Re-institute the suggestion box.

This focus group provided the most detailed and insightful information of the evaluation. Further results are detailed here:

Were classes enjoyable?

Focus group participants agreed that classes were very enjoyable because they were offered on an "adult-to-adult basis." Group participants defined adult-to-adult in several ways: (1) teachers employ multiple strategies to solve problems; (2) teachers use humor or stories to allay nervousness or tension participants might feel about not being able to learn something quickly; and (3) teachers never "pull rank" and make you feel bad for not knowing something.

Several participants described how ineffective former teachers in traditional school settings had been because they were unable to approach problems from multiple perspectives or take the learning styles of the students into account. Participants' comments about why they found classes so enjoyable provide insight into why and how adult education differs from what we consider traditional classroom teaching -- and why and how it succeeds when traditional methods fail. According to participants, traditional teachers are unimaginative and don't listen to their students.

There was general agreement that making a course outline available to students was very important. It seemed to give participants a sense of control over their learning. The teacher trusted them enough to give them a plan. He didn't just spring something new on them each time the class met. A sense of having new material imposed on you, when you were unready and lacking confidence, seemed to characterize most participants' prior school experience.

Did classes help you at work? If yes, how?

Participants said that class helped them with specific tasks like cutting yardage, preparing formulas, and measuring weights. They specifically noted help with conversion to metrics and knowing what numbers mean as opposed to performing meaningless functions -- on a calculator, for example. Learning became a game -- a literal one where participants would bring a problem they had encountered at work to class to try to stump the teacher. Eventually everyone would try to solve the problem. This fostered a team approach to learning and working that the participants appreciated deeply. In fact, this team approach helped participants so much that it reportedly created a difference in work-related social skills between class participants and others. Class participants know how to listen, and ask and answer questions better than non-participants.

According to focus group participants, employees who are not enrolled in the class -- supervisors and foremen as well as other workers -- would benefit from the kind of training they received. Focus group participants were very clear that learning with others in a supportive environment creates relationships which make working with each other much more pleasant and efficient. This is the result of feeling that you are dealing with a friend -- someone whose best interest you have in mind -- and not simply with a co-worker, someone who's there just to get the work done.

One participant gave an example of how a supervisor criticized something the participant said to him as "nagging" or intrusive. The participant answered that it was part of his job to make suggestions about how to do things better. The participant suggested that if the supervisor had been in the class with him -- if the supervisor had had the benefit of learning in an environment where offering suggestions is welcome -- he would have heard the suggestion differently: not negatively but positively. This participant said that now (since enrolling in class) he is more concerned about quality. "My name is on that ticket. And my profit."

Do you want others to enroll in class?

Participants agreed that other workers would benefit from enrolling in the workplace education program. They talked about what might prevent others from enrolling -- even when others know they need the help and want to enroll. Focus group participants said that some people are afraid to enroll because it makes public the fact that they need to continue their education. They said that some workers make it hard for others to acknowledge that they need educational support by ridiculing them -- calling the class 'kindergarten."

Focus group participants said that there are still some foremen who do not understand or support the program, making it difficult for workers to choose to go to class instead of staying at work. Focus group participants also suggested that top-level management needs to "get the word out" about the program. Management needs to publicly support enrollment as well as advertise the availability of classes through bulletin boards and through foremen's meetings and notes.

Has participation in class improved your communication skills?

Focus group participants agreed that participation in classes has resulted in improved communication skills. They specified results like not being afraid to talk; improved vocabulary (especially technical words); improved understanding of what someone else is saying; and improved ability to ask others to clarify what they are saying.

Related question: Do classes help the company?

Focus group participants agreed that participating in the class helps the company. Not only do participants improve specific communication skills like the ones described above, but participants feel more friendly toward their co-workers. This changes the way they perform their work together.

What would you like the program to offer next?

Participants were very clear they are ready for the following:

-- higher math
-- more GED instruction
-- college courses.

Are work-related materials useful?

Focus group participants agreed that it is good to use work-related materials in class, in both the math and language arts classes. The benefits include: learning your own job better; learning another job; and having an opportunity to practice your own or a new job more than you would be able to otherwise.

Are there any problems with the classes?

Focus group participants identified only one problem with the classes: having people at three different levels in one class. Participants were very generous with their comments about what it means to be in a class where people are at very different starting points, but they did say that it is a problem. Sometimes having three different levels of students holds people back who are ready to move on. Sometimes it makes people feel bad about holding other people back. It means that the class is often geared toward the middle.

Finally, the focus group participants made it perfectly clear that their communication skills improved significantly as a result of participating in the math class, not just the language arts class. This was the result of the math instructor's highly interactive, problem-solving approach to teaching. Students had no choice but to make their interests and questions known.

- **Math Midcourse Critique.** Students liked the math midcourse critique. It gave them a chance to tell the math instructor anonymously what they thought of the class, and helped to build investment in the course as something that belonged to them.

Eleven students completed the critique in the middle of the first cycle of classes. The instructor felt that responses were honest. For each question, responses tended to cluster in the middle range of choices with one or two responses at either extreme: (1) students were generally satisfied with the course; (2) the course was moving at just about the right pace, but two students felt left behind; (3) the instructor explained things clearly, but two students said they were not sure they understood everything; (4) the material was challenging, and four students said it was very challenging; (5) what students are learning is very useful; (6) no one said that they would not recommend the course to fellow employees; and (7) all but one said that s/he would take another course if it were offered.

The math midcourse critique helped the instructor to adapt his pace of instruction. It was a good tool for a quick, midcourse "check-in" with students.

- **Program Log.** The program log was a good-enough idea that did not implement well.

There was a need to document the rich anecdotal information about the program which circulated throughout the organization. Following the advice of the evaluation facilitator, the On-site Coordinator designated a special notebook as the program log and made it available to everyone in the class. He placed it on his desk -- normally a busy place where people gather to talk -- with the hope that students and others would write down their ideas and feelings about the program.

Virtually no one used the log. No one used it because its purpose was not clear, and students (and others) were not being regularly encouraged in class and elsewhere to use it as a means for improving the program. This is not a criticism of the teachers or other staff. It does point out that the purpose for a collective journal needs to be continuously clarified by all staff and that staff need to model its uses and results. Without this, it becomes either intimidating or meaningless.

Staff are figuring out how to best document the anecdotal information about the program that they do not want to lose. Using computers at work stations was being explored as an option.

• **Process Evaluation.** These are the seventeen components of a quality program which the team reviewed, and the actions team members needed to take to bring the component into "quality range."

Component #1: Articulate Philosophy of Program.
No action

Component #2: Develop and Implement Outreach and Recruitment Plan.
Action:

- More people want to enroll than the program can accommodate. There is a limit to the number of people who can be away from the machines at one time. The team needs to make a decision about the level of instruction the program should provide and who the program should target. Agreed: Target the program to people with the lowest skills and bring everyone up to basic mastery. Keep the schedule on shift, and then consider advanced classes. If the company becomes "more prosperous" it might be possible to get temps to cover during class time, but this is "easier said than done."

Component #3: Provide Orientation
The team agreed that the students are the "best ambassadors" but actions might include:

- Eric talks to supervisors about the program.
- Send message through electronic mail to sign up for GED and other messages about the program, too.
- Put announcement about the GED program and the basic skills program in the newsletter.

Component #4: Establish Intake Procedures
No action

Component #5: Design and Implement Initial Assessment Activities
Action:

- Think about the assessment procedures that need to be in place for the next cycle. Does the education staff want to develop Individual Education Plans (IEPs) for each student? How can initial assessments and IEPs become part of a portfolio assessment? (Keep in mind that the program is respectful of people's fears of testing, and assessments shouldn't scare people away.)

Component #6: Develop Curriculum
Actions:

- Move toward developing a more contextualized curriculum.
- Remove some slang from the glossary and move toward more-generic English.
- Document the curriculum. In Cycle 3, instructors should keep a "diary" of strategies they use in each class.

Component #7: Select Appropriate Learning Arrangements
Action:

- Do not group more than three levels of students in one class.
- Possible volunteer support to help teachers manage the range of skills students have.

Component #8: Develop On-going Assessment Procedures
Action:

- Devise a way to document ongoing student progress -- not just document at the beginning and the end of a course.
- Revisit this issue in September and possibly invite Kate Camarra to provide technical assistance on developing a portfolio assessment system. Pursue portfolio assessment whether Kate is available or not.

Component #9: Ensure Support Services

No action

Component #10: Staffing
Action:

Staffing is relative to how the program develops. Decisions need to be made about what the program should/could look like after federal funding ceases in December. For example:

- Should the program serve a new population?
- Should the program serve the current population at a new level?
- Should computer literacy become part of the program?

September is not too soon to think about December. The team suggested that it draw up a plan-plus-cost for a continuation program

Component #11: Staff Training and Development
Action:

- Staff should access more of the training available through the Bureau of Adult Education

Component #12: Program Planning, Evaluation, Monitoring and Management
Actions:

- Rename the "Language Arts" class. "Communication Skills" is a possible alternative.
- Program policy is that if students sign up, effort should be made to come to class. Teachers might publish course outlines so that students can see what they're committing themselves to.
- Add more students to the Planning and Evaluation Team. Add someone who is not a student so s/he can understand what program is about, and so that the team gets his/her perspective.
- Start a "Program Log" -- a big book or binder where everyone associated with the program and the company can write a word or more about what they feel/think about the program. (See memo to Fred about the "Program Log.")

Component #13: Tracking and Reporting
No Action:

Component #14: Fiscal Management

No action (but questions about fiscal management are relative to how the program continues).

Component #15: Facilities
No action (although it is noted that the program is not handicapped accessible.)

Component #16: Follow-up/Exit
No action

Component #17: The Business Education Partnership
No action

The Goals Evaluation Matrix

The following Goals Evaluation Matrix presents the program goals along with the data-collection procedures used to collect information related to those goals. On the basis of the information collected from the sources just described, an assessment is made about whether the goals were achieved or not and, if they were achieved, to what extent were they achieved. An asterisk indicates that the assessment needs some explanation. The explanation is provided at the end of the Matrix.

Haartz Corporation Workplace Education Program
Goals Evaluation Matrix

• = This goal was evaluated
A = This goal was achieved, as indicated by the related measure
AP = This goal was achieved partially, as indicated by the related measure
NA = This goal was not achieved
* = See notes at end of Matrix

GOALS	INSTRUMENTS/PROCEDURES FOR DOCUMENTING AND MEASURING GOALS					
	COMMUNICATION SKILLS SURVEY PRE/POST	WORKER FEEDBACK GROUP	MATH MID-COURSE CRITIQUE	PROCESS EVALUATION	NEWSLETTER UPDATES	ANECDOTAL INFORMATION
1. Viewing the student as "customer," we want to offer them a high quality product		• A	• A	• A	• A	• A
2. To improve problem-solving and communication skills with students to encourage their coming forward with solutions	•AP*	• A			• A	• A
3. To support and enhance Vertical/ Horizontal team concept * 1		• A			• A	
4 To establish within the culture of the Haartz Corporation a dynamically evolving philosophy of life-long learning and to create a bridge to other programs such as GED * 2		• A			• A	• A

27

BEST COPY AVAILABLE

Notes on the Matrix

* The pre-post survey did not document the kinds of gains in communication skills that were anticipated. As described, this was the result of student attitudes about being assessed on such a survey. Although the data were compromised, they still indicate that some communication skills were gained, if only through the process of making explicit with the instructors what the problems with the baseline data were.

* 1 The team did not discuss this goal explicitly very much as the grant year progressed, but it is fundamental to the changes that the company is trying to implement. Workers in the focus group did not use the language of vertical/horizontal teams but they did, in fact, reference improved teamwork throughout their discussion.

* 2 The most obvious indicator of the achievement of this goal is the expansion of the basic skills program to include an on-site GED program from which eight of twelve students received their GEDs after one course of instruction.

Preparing a strategy for reporting the findings

Strategies for reporting evaluation results were targeted to specific audiences. There were several audiences for this evaluation. The team had identified these audiences early in the evaluation process, while still identifying goals and indicators.

(1) The first audience was the members of the Planning and Evaluation Team itself. They were the first to receive reports from the evaluation facilitator and others about the results of any data-gathering activity. These reports were usually oral, and were later written in memo or report form. This audience included the company President.

(2) The second audience was other managers and employees in the company. They learned about the evaluation results throughout the year by word-of-mouth and reading articles or updates about the program in the Haartz Corporation newsletter.

(3) The third audience was other programs in the Massachusetts Workplace Education Initiative. The Program Coordinator, On-site Coordinator, and Evaluation Facilitator attended several meetings and conferences where they discussed the progress of the evaluation.

(4) The fourth audience was the program's two sponsoring government agencies: the U.S. Department of Education and the Massachusetts Department of Education. The Program Coordinator completed a final report of the evaluation for these two audiences, a product which has value for the other audiences, as well.

Phase IV: Deciding what happens next

Taking follow-up action

The team continuously took follow-up action and improved its program throughout the grant year, based both on what it was learning through the process of planning its data-gathering activities and on the actual products of subsequent data collection and analysis.

The team learned many things that are the result of discussion and analysis of problems prior to the formal collection of data. For example, discussions about indicators of communication skills led to an understanding among team members that some supervisors did not support the program sufficiently, most likely due to lack of information and discussion about it. The On-site Coordinator decided to lead a discussion about the program at a supervisors' meeting.

The actual collection of data -- from the math midcourse critique, to the communication skills survey, focus group, and the process evaluation -- also informed actions that the team took or might take to improve its program that have been discussed elsewhere in this case study.

Now that the program is being run with company money, the team continues to meet and oversee planning and evaluation activities. Participants in the employee focus group suggested that focus groups be held every three months so that there is a regular forum for collective discussion about the program. They also suggested that supervisors meet in focus groups to discuss the program. Presumably, the team is considering these options.

Evaluating the evaluation

- Overall, the team was pleased with the evaluation process and results -- defining results broadly as the totality of what the team learned.

- The Program Coordinator had been concerned that evaluation activities were taking too much time. (He was especially concerned about taking up too much supervisor and worker time in evaluation activities. This may have contributed to the delay of the supervisors' focus group.) However, at the end of the period in which the facilitator met regularly with the Haartz team, the Program Coordinator said that he understood the benefits of the process.

- A survey was not the evaluation instrument most suited to the Haartz Corporation culture. However, the exercise of designing the survey, collecting the data, and analyzing it was invaluable. It was a good "exercise" for the team, providing a platform from which it can evolve more meaningful data-collection techniques.

- With hindsight, the team could have made a more concerted effort to complete the work which had been agreed on -- mastering SPSS and conducting a supervisor focus group. The facilitator could have urged the team more strongly to complete its work.

IV. REFLECTIONS

Facilitator Laura Sperazi's comments:

- This evaluation was made easy by having a team already in place when the facilitator began her work. Team members represented all the stakeholders and they conceived of themselves as a team that could -- and should -- work for the benefit of the basic skills program.

- The process evaluation sessions worked very well. They worked so well that we should have spent more time working out the actions that needed to be taken to improve quality services, and then documenting those actions and their results. We could have taken better advantage of the On-site Coordinator's knowledge of SPC processes and integrated them into the process evaluation of the basic skills program. We could have made the purpose, function, and operation of SPC processes and the process evaluation of the basic skills program more explicitly parallel.

- The facilitator could have pressed the team to master SPSS and conduct a supervisor focus group -- work that was part of the loosely-defined contract between the team and the facilitator. But pressing these parts of the evaluation would have been awkward. The team worked very hard and did as much as it felt able to do. At the end, they were open to continuing evaluation activities on their own. If the facilitator had made the evaluation unpleasant by pressing for more work, the team may not have been so open to continuing on their own.

- The evaluation plan could have better accessed the Haartz Corporation's "oral" culture and informal information streams about the basic skills program. At Haartz, information about all aspects of work flows freely in conversation, and traditional ways of collecting information -- like surveys -- can seem lifeless by comparison. (For example, the President of the company walks the floor each day and engages workers in informal conversation about how they and their families are doing.) The facilitator could have encouraged the team to think more creatively about alternative ways to collect information that would have accessed the company's oral culture.

The worker focus group did access this source of information. It was an exciting event that helped to move the program forward. The program log had the potential to do the same. Presumably, the log will work better on computer than it did in "hard copy."

HAARTZ : Appendix A

Code ________

The HAARTZ Corporation
Pre-test for Students Enrolled in Cycle 2 + POST TEST
Focus on: Communication Skills at Work

Your answers to the following questions will help the program managers to improve the program. Please read the questions carefully and think about your answers. This information is CONFIDENTIAL. We do not want to know who you are. We do want to know what you think. So, please tell us what you really think!

Please circle the box which best describes you **now.** If you would like to tell us something more that the box allows, write your comments in the space provided. If you need more space, use the back of the questionnaire. For example:

1. I help my children with their homework.

☐	◧	◧	■	☒
not at all	[✓ sometimes]	a lot	always	does not apply

Comment: I love to do this.

1. I am: male female

2. I have worked at HAARTZ for:

- * Under six months
- * Between six months and a year
- * Between one and three years
- * Between three and five years
- * Between five and ten years
- * Over ten years

3. What class did your take in the first cycle ? math language arts none

4. What class are you taking now? math language arts

5. I speak up in meetings.

☐ not at all ☐ sometimes ☐ a lot ☐ always ☒ does not apply

Comment:____

6. I say what's really on my mind in meetings.

☐ not at all ☐ sometimes ☐ a lot ☐ always ☒ does not apply

Comment:____

7. I use technical words when I need to.

☐ not at all ☐ sometimes ☐ a lot ☐ always ☒ does not apply

Comment:____

8. I make suggestions about how to improve the way we work.

☐ not at all ☐ sometimes ☐ a lot ☐ always ☒ does not apply

Comment:____

9. I ask my supervisors questions when I need to.

☐ not at all ◧ sometimes ◨ a lot ■ always ☒ does not apply

Comment:____

10. I ask the people I work with questions when I need to.

☐ not at all ◧ sometimes ◨ a lot ■ always ☒ does not apply

Comment:____

* What do you ask about? Check the ones which are true for you.

___ how the job gets done
___ when new equipment will be installed
___ suggestions to make work easier
___ 401 K
___ Profit sharing
___ Benefits, including health, dental, life insurance, sick leave, etc.
___ Other things. Please tell us what they are.

____

____

____

11. I talk to my supervisors with confidence.

☐ not at all ◧ sometimes ◨ a lot ■ always ☒ does not apply

Comment:____

12. I let supervisors know that I have important skills, and that I am ready to use them.

☐ not at all ◧ sometimes ■ a lot ■ always ☒ does not apply

Comment:____

13. My supervisors understand me when I talk to them.

☐ not at all ◧ sometimes ■ a lot ■ always ☒ does not apply

Comment:____

14. The people I work with understand me when I talk to them.

☐ not at all ◧ sometimes ■ a lot ■ always ☒ does not apply

Comment:____

15. I talk with my supervisor about ideas that improve quality.

☐ not at all ◧ sometimes ■ a lot ■ always ☒ does not apply

Comment:____

16. I talk with people I work with about ideas that improve quality.

☐	◧	◨	■	☒
not at all	sometimes	a lot	always	does not apply

Comment:____

*If you feel that you do not know how to talk with your supervisors about quality, what would help you? Check what is true for you.

___ Supervisors talk to you more
___ Better instructions
___ More information about why quality is important
___ Other things that would help, Please tell us what they are.

____

____

____

17. My supervisors let me know I have good ideas.

☐	◧	◨	■	☒
not at all	sometimes	a lot	always	does not apply

Comment:____

18. The people I work with let me know I have good ideas.

☐	◧	◨	■	☒
not at all	sometimes	a lot	always	does not apply

Comment:____

19. I read job instructions.

☐	◧	◨	■	☒
not at all	sometimes	a lot	always	does not apply

Comment: ____________________

20. I read safety procedures.

☐	◧	◨	■	☒
not at all	sometimes	a lot	always	does not apply

Comment: ____________________

21. I read bulletin boards.

☐	◧	◨	■	☒
not at all	sometimes	a lot	always	does not apply

Comment: ____________________

22. I work well with the other people on the floor.

☐	◧	◨	■	☒
not at all	sometimes	a lot	always	does not apply

Comment: ____________________

23. I offer help to my supervisors.

☐	◧	◼	■	☒
not at all	sometimes	a lot	always	does not apply

Comment: ____________________

24. I offer help to people I work with.

☐	◧	◼	■	☒
not at all	sometimes	a lot	always	does not apply

Comment: ____________________

25. I teach new workers about how the workplace runs.

☐	◧	◼	■	☒
not at all	sometimes	a lot	always	does not apply

Comment: ____________________

26. I use the information on the floor (i.e., computer print outs, memos, etc.) to improve how I do my work.

☐	◧	◼	■	☒
not at all	sometimes	a lot	always	does not apply

Comment: ____________________

HAARTZ Appendix B

The HAARTZ Corporation
Survey for Students Enrolled in Cycle 1
Focus on: Communication Skills at Work

As you know, the basic skills program has been in operation for about seven months. Program managers are interested in finding out what effects the program is having. Your answers to the following questions will help the program managers to improve the program in the next cycle.

Please read the questions carefully and think about your answers. This information is CONFIDENTIAL. We do not want to know who you are. We do want to know what you think you have learned. So, please tell us what you really think!

The first time you answer the question, circle the box which best describes you **before** you attended your class. The second time you answer the question, circle the box which best describes you **after** you attended your class. If you would like to tell us something more than the box allows, write in the space provided. If you need more space, use the back of the questionnaire. **For example:**

1. I help my children with their homework.

Before

☐	[✓ ◧]	▮	■	☒
not at all	[✓ some-times]	a lot	always	does not apply

After

☐	◧	[✓ ▮]	■	☒
not at all	some-times	[✓ a lot]	always	does not apply

1. I am: male female

2. I have worked at HAARTZ for:

*Under six months
*Between six months and a year
*Between one and three years
*Between three and five years
*Between five and ten years
*Over ten years

3. What class did you take in the first cycle? math language arts

4. What class are you taking now? math language arts

5. I speak up in meetings.

		Before					**After**		
☐	▌	▆	■	☒	☐	▌	▆	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

6. I say what's really on my mind in meetings.

		Before					**After**		
☐	▌	▆	■	☒	☐	▌	▆	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

7. I use technical words when I need to.

		Before					**After**		
☐	▌	▆	■	☒	☐	▌	▆	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

8. I make suggestions about how to improve the way we work.

		Before					**After**		
☐	▌	▆	■	☒	☐	▌	▆	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

9. I ask my supervisors questions when I need to.

		Before					**After**		
☐	◧	◼	■	☒	☐	◧	◼	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

10. I ask the people I work with questions when I need to.

		Before					**After**		
☐	◧	◼	■	☒	☐	◧	◼	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

*What do you ask about? Check ones which are true for you.
___ how the job gets done
___ when new equipment will be installed
___ suggestions to make work easier
___ 401 K
___ Profit sharing
___ Benefits, including health, dental, life insurance, sick leave, etc.
___ Other things. Please tell us what they are.

____

____

____

11. I talk to my supervisors with confidence.

		Before					**After**		
☐	◧	◼	■	☒	☐	◧	◼	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

12. I let supervisors know that I have important skills, and that I am ready to use them.

Before

☐ not at all ◧ sometimes ▣ a lot ■ always ☒ does not apply

After

☐ not at all ◧ sometimes ▣ a lot ■ always ☒ does not apply

Comment:______________________________

13. My supervisors understand me when I talk to them.

Before

☐ not at all ◧ sometimes ▣ a lot ■ always ☒ does not apply

After

☐ not at all ◧ sometimes ▣ a lot ■ always ☒ does not apply

Comment:______________________________

14. The people I work with understand me when I talk to them.

Before

☐ not at all ◧ sometimes ▣ a lot ■ always ☒ does not apply

After

☐ not at all ◧ sometimes ▣ a lot ■ always ☒ does not apply

Comment:______________________________

15. I talk with my supervisors about ideas that improve quality.

Before

☐ not at all ◧ sometimes ▣ a lot ■ always ☒ does not apply

After

☐ not at all ◧ sometimes ▣ a lot ■ always ☒ does not apply

Comment:______________________________

16. I talk with people I work with about ideas that improve quality, such as, better instructions for Standard Operating Procedures.

Before					**After**				
☐	◧	▮	■	☒	☐	◧	▮	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

17. My supervisors let me know I have good ideas.

Before					**After**				
☐	◧	▮	■	☒	☐	◧	▮	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

18. The people I work with let me know I have good ideas.

Before					**After**				
☐	◧	▮	■	☒	☐	◧	▮	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

19. I read job instructions.

Before					**After**				
☐	◧	▮	■	☒	☐	◧	▮	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

20. I read safety procedures.

Before					**After**				
☐	◧	▮	■	☒	☐	◧	▮	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

21. I read bulletin boards.

Before					**After**				
☐	◧	▮	■	☒	☐	◧	▮	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

22. I work well with the other people on the floor.

Before					**After**				
☐	◧	▮	■	☒	☐	◧	▮	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

23. I offer help to my supervisors.

Before					**After**				
☐	◧	▮	■	☒	☐	◧	▮	■	☒
not at all	sometimes	a lot	always	does not apply	not at all	sometimes	a lot	always	does not apply

Comment:____

24. I offer help to people I work with.

Before	☐ not at all	◧ some-times	▨ a lot	■ always	☒ does not apply
After	☐ not at all	◧ some-times	▨ a lot	■ always	☒ does not apply

Comment: ____________________

25. I teach new workers about how the workplace runs.

Before	☐ not at all	◧ some-times	▨ a lot	■ always	☒ does not apply
After	☐ not at all	◧ some-times	▨ a lot	■ always	☒ does not apply

Comment: ____________________

26. I use the information on the floor (i.e., computer print outs, memos, etc.) to improve how I do my work.

Before	☐ not at all	◧ some-times	▨ a lot	■ always	☒ does not apply
After	☐ not at all	◧ some-times	▨ a lot	■ always	☒ does not apply

Comment: ____________________

HAARTZ Appendix C

ACTON PUBLIC SCHOOLS • ACTON-BOXBOROUGH REGIONAL SCHOOL DISTRICT
16 Charter Road • Acton, MA 01720-2995 • (508) 264-4700

OFFICE OF THE SUPERINTENDENT
Arthur Goodall, Director
Faculty Externship Program

May 24, 1993

TO: Laura Sperazi

FROM: Art Goodall

RE: Haartz Corporation - Draft Survey for Students Enrolled in Cycle 1, 5/5/93
Focus on: Communication Skills at Work

On this day both Rodney Goguen and George Pickles were asked to respond to this survey with Art Goodall serving as the survey facilitator. The Survey was given in a comfortable, quiet, well-lit space identified as the Lab Conference Room for Rodney Goguen and the Building 14 classroom for George Pickles, both located at The Haartz Corporation.

It was explained to Messers Goguen and Pickles that they had been selected from a group of student workers who had completed Cycle 1 of The Haartz Workplace Education Program. It was further noted that this was not a test that would be graded and that there were "no wrong anwsers".

Prior to actually starting to answer the questions, Mr. Goguen noted that Workplace Education was a very valuable program at Haartz and that he had personally profited from this experience. He specifically singled out Mr. Kenneth Russell as a very able instructor in Mathematics and that he hoped the Program would grow and include an even broader variety of people.

Mr. Pickles felt that the Language Arts Program, instructed by Meaghan Mahoney offered considerable individualized instruction. He also felt that good opportunity had been provided to practice a variety of communication skills. Meaghan Mahoney was spoken of with warm praise for the variety of opportunity which she provided to her classes.

George Pickles noted that the Language Arts Class opened lines of communications between workers which, prior to this class, were closed. A comraderie or esprit de corps was built to a level, which heretofor had not been as evident. Mr. Pickles noted that Ms. Mahoney worked with his group offering a variety of techniques including the debate of issues, definition of words and some grammar, many times within the context of a game. Mr. Pickles felt that many members of the class benefited from the stimulation of these activities and discussions bringing such people out as a result of a boost in their self confidence. When asked, George Pickles felt that some members of the company who had not participated in either Cycles 1 or 2 were being positively impacted by the presence of the Program within the workplace. He and others are being asked questions about the Program from those individuals who are considering signing-up for Cycle 3.

With respect to the Survey Instrument, Mr. Goguen made the following points:

- The first two sentences in paragraph 3 are confusing. One must read these sentences twice and then read the rest of the paragraph to make complete sense of the direcitons.
- With respect to Questions 6, 7, and 8, because Mr. Goguen has always spoken up in meetings, the math class experience did not result in significant change.
- With respect to Questions 12 and 15, because Mr. Goguen has recently been promoted to a new position, he has been anxious to let supervisors know about his skills and his confidence in handling the challenges of the new assignment.
- With additional commentary on Question 15, Mr. Goguen now discusses quality to a greater extent in his advanced position and is looking for additional time to engage in more of these discussions.
- With respect to Question 26, Mr. Goguen suggested that we incorporate examples of what is meant by "information on the floor".

The Survey was completed in approximately 20 minutes. Please find enclosed 14 copies of The Haartz Corporation Pre-test for Students Enrolled in Cycle 2.

With respect to the Survey Instrument, Mr. Pickles questioned Item #16 especially the phrase "Better Instructions". He suggested that the item could be strengthened by extending the phrase to include, "Better Instructions for Standard Operating Procedures".

c2

HAARTZ: Appendix

Haartz Corporation Workplace Education Evaluation

July 22, 1993
Questions for Worker Focus Group

1. **What are the two most important things that you've learned in your class?** Why are these things so important?

2. **Are communication skills necessary to do good work at Haartz?**
   What do the words "communication skills" mean to you?
   -- Speaking
   -- Reading
   -- Writing
   -- Listening
   -- Other?

3. **Does being in class help you to improve your communication skills? Why/How?**
   - Please give us an example of how being in class helps to improve your communication skills. Be specific.
     For example. does being in class help you to: (Can refer to indicators list here)
     -- read job instructions
     -- talk to your supervisors more
     -- read bulletin boards

4. **Have you changed as a result of being in class? How have you changed?**
   - Have you seen others change? How have they changed?
   - Has the organization changed as a result of sponsoring classes? How has it changed? Have supervisors changed? If so, how?
   - Do you know that federal support for the program will end in January?
   - Would you like the company to continue classes beyond January?
   - What would you like to the program to include?

5. **What things does the teacher do in class that help you learn the most?** (Talk to you, give you assigments, facilitate group discussion?)
   - What would you like the teacher to do more of?
   - Is there anything else you want included in your class? (Videos, audio tapes, etc?)

D1

HAAPTZ

Appendix E

Math Midcourse Critique

1. How do you feel about the course at this point?
    - a. Very happy
    - b. Happy
    - c. Satisfied
    - d. Dissatisfied
    - e. Unhappy

2. Is the course moving
    - a. Much too fast
    - b. Too fast
    - c. Just about right
    - d. Too slowly
    - e. Much too slowly

3. Does the instructor explain things
    - a. So I understand very clearly
    - b. So I understand clearly
    - c. So I understand
    - d. So I'm not sure I understand
    - e. So I don't understand or am confused

4. Does the instructor make things
    - a. Very interesting
    - b. Interesting
    - c. OK
    - d. Not very interesting
    - e. Boring

5. Is the material
    - a. Very challenging
    - b. Challenging
    - c. OK
    - d. Not very challenging
    - e. Boring

6. Is what you are learning
    - a. Very useful
    - b. Useful
    - c. OK
    - d. Not very useful
    - e. Useless

7. Would you recommend this course to your fellow employees?
    a. Absolutely b. Yes c. Maybe d. I doubt it e. No

8. Would you be interested in taking another course if it is offered?
    a. Absolutely b. Yes c. Maybe d. I doubt it e. No

COMMENTS: ____________________

HAARTZ Appendix F

Workplace Education Evaluation

Quality Indicators of Program Process
"What do you need to have in place in your program in order to achieve your goals?"

The information in the chart below stems from past evaluations of workplace education programs in the Massachusetts Workplace Education Initiative and the SABES Checklist of Indicators of Program Quality. As the information is removed from its context for the purpose of giving an overview, it is key to analyze it critically in order to determine whether or not it may apply to your program.

By *processes* we mean all the components of a program that have been developed or put into place to achieve the goals and objectives. Processes are the answers to the question: What have we done or established in order to achieve our goals '

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Articulate Philosophy of Program	clear mission statement, goals, and approach/educational philosophy
Develop and Implement Outreach and Recruitment Plan	plan for active recruitment in company with strategies and materials appropriate to linguistic and ethnic diversityof workplace; clear statements of what program does and doesn't do
Provide Orientation	activities to orient potential participants, supervisors, and other company personnel to program
Establish Intake Procedures	appropriate assessment and goal setting with learners; referral system that links learner through program with (more) appropriate training or education opportunities

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Design and Implement Initial Assessment Activities	assessment of skills related to learner goals; assessment related to curriculum; assessment is non-threatening and confidential; assessment is at convenient times and policies are in place that facilitate participation; bilingual assistance is available if needed; assessment results in Individual Education Plan; mechanism in place to share results with learners and teachers; assessment results inform placement, curriculum development, instruction; assessment results inform referral and identify need for support services;...
Develop Curriculum	curriculum development process is documented/can be articulated by partners involved; curriculum development draws on learner need, ability, and interest; curriculum is contextualized; ...
Select Appropriate Learning Arrangements (e.g. group instruction, computer-assisted learning, etc.)	selection of learning arrangement is based on partnership need, preferences, and resources; content is based on learner goals, interests, and needs; methods, activities, and materials are appropriate for adults and reflect the workplace; classes are scheduled at times that all interested participants can attend; ...
Develop On-Going Assessment Procedures	documents learner progress toward their goals; takes place between learner and teacher; is based on clear benchmarks;...
Ensure Support Services	program provides necessary support services (e.g. counseling, transportation, childcare, bilingual assistance etc.) or links learner through program with support services in community;

Curr. + instruction. [illegible] behaviors students need to learn + which the organization desires.

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Staffing	clear job descriptions; staff selection reflects communities of participants; adequate supervision and evaluation; clear policies; opportunities for growth; ...
Staff Training and Development	pre-service orientation for staff; opportunities for staff to attend staff development activities; ...
Program Planning, Evaluation, Monitoring, and Management	has an active Planning and Evaluation Team; holds regular Planning and Evaluation Team meetings; has a program development/implementation plan; has mechanisms to solicit learner, supervisor, manager, and labor input; has an orientation for team members; has clearly defined roles, responsibilities, and decision-making processes; has documented interagency agreements; has links with other programs; has clear policies for attendance, release time, etc.; has on-going and participatory evaluation process that uses both qualitative and quantitative data to look at learner progress, program components, and organizational changes; ...
Tracking/Reporting	has ways to document learner progress; tracks workplace demographics, applications, enrollments, attendance, outcomes, and waiting lists; ...
Fiscal Management	tracks budget by funding source (e.g. release time); has accurate record systems; prepares and submits reports in a timely fashion; ...
Facilities	has adequate furnishings and space; has sufficient supplies; is handicapped accessible; is clean, well-lit, and ventilated; has photocopier, typewriter, or PC; ...

F 3

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Follow-Up/Exit	has ways to support learners in next steps; has established links between program and further education and training; has system to contact learners after they complete/exit the program to determine reason for withdrawal and/or to track learner progress; ...
Other QUALITY OF BUSINESS/EDUCATION PARTNERSHIP	has common language; meets regularly; ...

F 4

TEAM EVALUATION AT THE NORTON COMPANY: A CASE STUDY FROM A WORKPLACE EDUCATION PROGRAM

Prepared
by
Laura Sperazi

One of seven case studies in
"Team Evaluation:
Case Studies from Seven Workplace Education Programs,"
a report prepared in June 1994
by Laura Sperazi and Paul Jurmo

THE NORTON COMPANY

Worcester, Massachusetts

I. PROGRAM BACKGROUND

Program history

The Norton Company, founded in 1885, is a world-wide manufacturer of grinding wheels, diamond cutting products, and sand paper. It sells its products primarily to industrial customers. The Companie St. Gobain, a large French corporation which began producing glass in the seventeenth century and now produces insulation, pipes, silicon wafers, and other such products, bought out the Norton Company in September of 1990. The buy-out prompted some of the organizational changes which the Norton Company is still undergoing -- changes which include a new emphasis on quality, on-time production, and team-based management.

The Norton Company employs almost 16,000 people world-wide. The Bonded Abrasives Division, for which the original Norton Company job-related math skills course was designed, manufactures grinding wheels and employs about 1,200 people in Worcester, Massachusetts. An explicit goal of the Norton Basic Skills Program is to facilitate the organizational changes that are intended to enhance the company's competitiveness.

However, there is a bias against organizational change "buzz words" in this culturally conservative company. Managers do not loosely use "TQM" or "continuous improvement" or other fashionable phrases the way other companies might because, according to one manager, "there is so much diversity in what those phrases mean." Manager of Human Resources struggle deeply with defining clearly the essential changes in the organization of work that are needed to support their new business strategy. They struggle to define and provide the support which employees need to perform in accordance with those changes. And members of the Norton Basic Skills

Committee[1] struggle to define the appropriate goals and measures for their Basic Skills Program so that there will be symmetry among the goals of the business, the goals of the training program, and the goals of the evaluation.

The "bottom line" of change at the Norton Company is that "there is some reorganization of work and an associated transfer of power and decision making to more people." As one Manager of Human Resources said: "We have to re-engineer the way we do business. Human potential needs to be developed individually and collectively. Without a re-engineered human component, any other process will not succeed." The company -- and the training department in particular -- need to move workers to "where the work is." Bonded abrasives is a "very fickle" business; the work changes rapidly. Therefore, the company needs to move employees in the direction of the demand for work without having the pace of change frighten -- and perhaps incapacitate -- them. .

Program goals and components

The introduction of organizational changes and related computerized technologies clarified the need to provide math instruction to some employees. Within a couple of years of providing math instruction (which began in 1990), the need for additional instruction in language arts, blueprint reading, and measurement was clarified. The opportunity to conduct a formal evaluation of the Basic Skills Program further clarified the need to define measurable goals and indicators for the program. (See "Clarifying program goals and the information to look for," below.)

---

[1] The Norton Company Bonded Abrasives Basic Skills Committee is virtually synymous with a Planning and Evaluation Team. The Basic Skills Committee is composed of representatives from all the stakeholder groups, including program participants. The Basic Skills Committee oversees the planning and operation of the basic skills program and was involved in the early and middle phases of conducting the evaluation. In practice, a few members of the Basic Skills Committee have taken responsibility for carrying out the last phase of work for the evaluation. Throughout this case study, Basic Skills Committee and evaluation team are used interchangeably.

As of November 1993 a total of ten classes were offered over three shift periods. The classes included: three math; three language; two computer-enhanced blueprint reading; one introduction to measurement; and one machine maintenance class taught by an employee on the Basic Skills Committee. (Teaching the class was this employee's idea and grew out of his participation on the Basic Skills Committee)

The company provides 50% release time to all Basic Skills Program participants. About one hundred thirty students have completed a course of instruction in the program. There are about 100 participants enrolled in the current course offerings. (This includes participants who have completed other courses in the Basic Skills Program and are continuing to receive instruction.)

The Workplace Education Program within the Center for Life-Long Learning at Quinsigamond Community College in Worcester, Massachusetts is the learning provider for the Norton program.

II. BACKGROUND ON THE TEAM

History of the team

The team-based evaluation of the Norton Basic Skills Program began in late April 1992. At that time the Norton Basic Skills Committee had already been meeting regularly every two weeks for eight months. At that time, the Norton program was funded through the Massachusetts Workplace Education Initiative (MWEI), Cycle 5.

The presence of a committed Basic Skills Committee in the early stages of the Norton program was the result of two factors.

First, the Workplace Education Program Coordinator at the Center for Life-long Learning at Quinsigamond Community College had participated in the MWEI's evaluation of its fourth cycle of sponsored programs. This evaluation used evaluation teams to conduct their own evaluations for the first time in Massachusetts. The benefits of that experience encouraged her to replicate the team evaluation model in her new program from the beginning.

Second, the Manager of Human Resources was accustomed to working in teams and immediately saw the value of regular communication about the development and evaluation of the Basic Skills Program. The evaluation facilitator met with the Norton Basic Skills Committee (this is what the team called itself) first under the auspices of the MWEI -- from April through June -- and then under the auspices of the National Institute for Literacy research project – from December 1992 through March 1994.

The members of the Basic Skills Committee were ready and eager to address questions about the outcomes they could expect from their program. The team focused almost exclusively on organizational outcomes, and this focus was a function of three important factors:

(1) the need to understand the full dimension of the organizational changes the company was/is undergoing;

(2) the understanding that these organizational changes will be achieved largely through educating and retraining employees; and

(3) the intention to link organizational changes directly to the training and education programs which are intended to improve the skills of the workforce.

It is important to note, however, that despite the focus on organizational outcomes, the team supported the achievement of worker's personal goals through enrollment in the Basic Skills Program. Achieving personal goals would simply not be the focus of the evaluation.

Stakeholders represented on the team

Committee members included:

- Donna Holden , Administrative Coordinator, Training Department
- Bethany Brockmeyer, Educational Coordinator for the North American Abrasives Group
- Ray Bull, Training Coordinator
- Brian Eyles, Program Participant, Former Floor Operator (having suffered an injury at work, he now works in the administrative office)

- Brad Field, Systems and Sourced Product Manager for Superabrasives Division
- Jack Gagnon, Floor Operator, Program Participant
- Bert Galarza, Floor Operator, Program Participant
- Joseph Javorski, Manager of Human Resources, Precision Business
- James Litwinowich, Manager of Quality
- Joseph Passeri, On-site Program Coordinator and Instructor
- Kathy Rentsch, Workplace Education Program Coordinator, Center for Life-long Learning, Quinsigamond Community College
- Mark Stacey, Manager of Human Resources
- Cal Wilson, Departmental Supervisor

The composition of the Basic Skills Committee changed considerably during the fifteen months of the NIFL-sponsored evaluation. The people named above were all part of the group for a period of time. However, a core group of people have provided continuity in the committee for this period. These people include Bethany Brockmeyer, Joseph Javorski, and Joseph Passeri. Kathy Rentsch was a regular member of the team until May 1993 when she left her job as Workplace Education Program Coordinator at Quinsigamond Community College.

III. THE PROCESS WHICH THE TEAM WENT THROUGH

Summary: Between April and July 1992, the evaluation facilitator met with the Norton Basic Skills Committee three times. Between December 1992 and April 1994, the evaluation facilitator met with the Norton Basic Skills Committee eight times.

Four of the eight meetings were held on-site at the Norton Company with trainers for a computer data-base program called Statistical Package for the Social Sciences (SPSS). (Two of these meetings were day-long; two were half-day; all trainings were conducted for the Norton team exclusively.) Steven Andrews and Alice Oberfield Andrews conducted the SPSS training and were available for telephone consultation as needed.

One of the meetings was held with Donald Cichon, of Donald Cichon Consultants, who advised on technical aspects of survey development. Donald Cichon was also available by phone as needed.

In addition to these eight meetings with the evaluation facilitator, Steven Andrews met once by himself with selected members of the Basic Skills Committee to advise on coding survey data.

The Basic Skills Committee also met with the facilitator, SPSS trainers, and the evaluation teams from Bull Worldwide Information Systems and the Haartz Corporation once in early February 1993 for an introduction to SPSS and an overview of activities of the three evaluation teams. This makes a total of thirteen meetings and trainings which the Norton team participated in.

During these meetings the team:

- clarified its goals for the evaluation.
- specified one primary indicator of success for its Basic Skills Program -- improved employee involvement in the organization.
- expanded the primary indicator to include involvement on particular jobs as well as in the organization as a whole.
- developed several formats for a survey focused on employee involvement in the organization and on the job.
- collected data from approximately 160 program participants, including maintenance data on approximately 30 participants.
- coded the data according to SPSS requirements.
- programmed the data.
- attempted to run the data for preliminary analysis.
- revised its evaluation plan.

Only the most preliminary analyses of the data had been run at the time of the formal conclusion of the evaluation. There are several interconnecting explanations for this. They include:

(1) Typing the coded data onto a computer was a more complicated task for a novice team to manage than either the team or the facilitator had imagined. It was more complicated because support staff to whom this task had been delegated had to learn a new data-entry format and because the data which the team had generated were voluminous. The SPSS format requires some study and it was time-consuming and tedious to type coded data for hundreds of variables and multiple versions of surveys onto a computer.

(2) Turnover in support staff further delayed the completion of this task. New support staff had many responsibilities other than finishing the computer work for what was probably perceived as a marginal project. This new person had no continuity with the evaluation and therefore no personal investment in completing it.

(3) A job change for one key member of the team resulted in his spending less time thinking about and working with the evaluation project.

(4) The SPSS consultants and evaluation facilitator were committed to the idea that team members should learn to run the SPSS program themselves, and it did not occur to them to contract out the input and analyses when it was probably appropriate to do so. The SPSS consultants could have completed the input and preliminary analyses themselves, and then advised the team on how to proceed on their own, with continued guidance as needed.

(5) Furthermore, as the length of time between data collection and analysis grew, a new perspective on how evaluation might be conducted in a more decentralized manner was put forth by a key member of the team. This cast doubt on whether this evaluation should be concluded according to the original plan.

Despite these drawbacks, work on the evaluation has been very valuable. Work on the evaluation has provided a continuous forum for key stakeholders to clarify what is important to know about what their program is achieving. One key member of the team, the Educational Coordinator for the North American Abrasives Group, has taken the initiative to lead the evaluation through the analysis stage. She is motivated to do so because she will be a resource in basic skills program development to as many as twelve to sixteen other Norton plants in the United States. She would like an effective evaluation model to share with others. The evaluation of the Basic Skills Program at Bonded Abrasives in Worcester gives her the opportunity to iron out snags in the model before replicating it. The key elements of the plan to continue the evaluation at Bonded Abrasives are described below in "Taking follow-up action."

Phase 1: Preparing the team

Initial preparations

As described above, the Norton Basic Skills Committee began meeting in September 1991 under the auspices of the Massachusetts Workplace Education Initiative. When the evaluation facilitator began to work with the team in April 1992, she did not have to persuade Basic Skills Committee members about the value of team-based evaluation. Committee members were quite open to considering evaluation activities as part of their work. The MWEI had prepared them for this. However, only a few members had any formal experience with evaluation. The facilitator introduced the purposes and methods of workplace education program evaluations and provided a forum in which questions related to evaluation could be addressed. The team's experience with the facilitator was positive enough that they accepted her offer of continued facilitation under the auspices of the National Institute for Literacy.

Organizing the evaluation team

Program staff took responsibility for organizing the evaluation team. See list of members, above.

Phase II: Planning the evaluation

Clarifying program goals and the information to look for

This section explains how the team decided to focus on "employee involvement" as the central indicator of success of its Basic Skills Program, and how new dimensions of that indicator evolved over time. It is useful to understand the process which the team went through to decide on this particular focus.

The team began by defining outcomes for the Basic Skills Program[2] in the broadest of organizational terms: "creating a flexible workforce." The team then specified some of the skills employees need in order to perform many jobs "flexibly." These new skills include math and measurement; communication; problem solving; and understanding how the business cycle works -- lead time, on-time delivery, etc.

---

[2] When the evaluation was begun, the Basic Skills Program was called the Job-Related Math Program. Only math instruction was offered. It soon evolved into the Basic Skills Program where more

The team got more specific about possible "quality outcomes" for the Basic Skills Program when it addressed the question of improvement of individual -- as opposed to team -- productivity. The team questioned whether it is possible to measure change in individual productivity based on participation in the Basic Skills Program. This was because work at Norton is conducted in teams, and that the organization will become only more team-oriented.

In an attempt to deal with this question of measuring individual employee productivity, the team identified "better recording on SPC" as a desired outcome of the job-related math program. Properly defined this would, in fact, be an effective measure of individual improvement in productivity. The evaluation team defined better recording on SPC in two ways:

(1) How quickly are employees identifying a process as out of control or tending to be out of control; and once the process is identified as out of control, how quickly can employees come to a solution for cause/variation?

(2) How effectively can employees investigate the source of the problem and rework what needs to be reworked?

At this point it became clear that better recording on SPC -- as well as all the other broad organizational outcomes which the team identified -- are not the desired outcomes of the Basic Skills Program alone, but rather of the whole education and training effort. Put another way, a job-related Basic Skills Program cannot shoulder the burden of bringing about broad-based organizational change, or of improved use of SPC.

---

than math instruction was offered. For the sake of clarity, throughout the rest of this case study we refer to the Basic Skills Program, unless it is appropriate to specify the Job-Related Math Program.

However, it does have a specific role to play alongside other education and training programs. That role is supporting the development of a culture of continuous product improvement through education and training, and of helping employees to 'bridge" effectively to other education and training programs within the company -- programs in which they could not participate unless they had the benefit of basic skills instruction. Indicators of the success of the Basic Skills Program should then include how well the program helps employees to bridge to other programs, and on how class instruction fosters an environment of continuous improvement through education.

By the end of the second team meeting with the evaluation facilitator, two important conceptual shifts occurred:

(1) The team understood that participatory instructional methods in the classroom promote the very skills that the company wants to teach all its employees: creative problem solving, taking initiative, collaborating with others, etc. This means that employees who are enrolled in a basic skills course have an advantage over others. They receive extra training in the new skills which the company is promoting. One team member put it this way: "Instead of seeing education separate from manufacturing, we now see the integration. Job-related basic skills can work exponentially to change the organization. The instructor in the classroom is like a group leader. There is no wall that separates one process from another."

(2) The team agreed to focus on "employee involvement" as the indicator of the success of their workplace Basic Skills Program. This desired outcome was the same outcome that other training efforts were trying to bring about. It was the outcome that seemed to capture the essence of the organizational change that the company was trying to bring about. At this time, the team defined employee involvement relative to the organization, not relative to job performance. Involvement in the organization might include -- among other things -- volunteering or being asked to take the lead role in a project; volunteering or being asked to make a presentation to supervisors; volunteering or

being asked to lead a company tour; continuing education; and bidding for better jobs. (See Appendix A.[3])

The following list details the goals which the team pursued in its early meetings, ending with improved employee involvement.

- Flexibility of the workforce. Employees are learning new skills to perform more jobs. These new skills include:
    - -- math and measurement
    - -- communication
    - -- problem solving
    - -- understanding how the business cycle works -- lead time, on-time delivery, etc.
- Transferability of skills from class to work.
- Bidding for better jobs
- Individual productivity improvement.
- Increase in employee self confidence.
- Retention.
- Decrease the number of rejects, "increase productivity" --
- Better recording on SPC.
    - -- How quickly are employees identifying a process as out of control or tending to be out of control; and once the process is identified as out of control, how quickly can employees come to a solution for cause/variation?
    - -- How effectively can employees investigate the source of the problem and rework what needs to be reworked?
- Employee involvement
    - -- take the lead role in a project
    - -- continuing education

By the third meeting, the team was further specifying the indicators of improved employee involvement in the organization, and drafting sample questions for a questionnaire which would be given to all participants in the Basic Skills Program. The team anticipated that the results of a questionnaire administered before and after enrollment would demonstrate improved employee involvement for most program participants. The team also considered identifying a control group so that the evaluation could attribute improved employee involvement to participation in the Basic Skills Program and not to other factors.

---

[3] Appendix A is the final draft of the survey instrument which focuses on employee involvement. It contains the original questions which focus on involvement in the organization, but it also contains new questions which focus on involvement on the job. The following sections of the case study describe how the focus evolved from involvement in the organization to involvement on the job.

With documented improvements in employee involvement resulting from participation in the Basic Skills Program in hand, the training program leadership would be in a strong position to argue to company managers that this type of training moves the company toward achieving its desired organizational change. The team completed the first questionnaire and used it to guide pre-enrollment interviews with 100 participants in September 1992.

When the facilitator began to work with the team again in December 1992, about 60 additional questionnaires had been completed.

However, in the winter of 1992-3, some issues concerning the administration of the survey, the content focus of the evaluation, the use of a control group, and the overall amount of work that the evaluation was requiring began to surface. These issues surfaced and resurfaced throughout 1993 in the following ways.

- Strengths and limitations of the interview format
  The team had decided to gather the survey data in an interview between the program participant and the On-site Coordinator. These interviews took about an hour each. While the team felt committed to the quality of the information they were getting through this interaction, they also felt that the time being spent was excessive. One hundred interviews meant one hundred hours just gathering information. The time required to collect information sometimes led to information not being collected on time. If there were other things that the On-Site Coordinator had to do to keep the program going, those things would get priority. Data collection would take a back seat.

- Options for data collection
  The goal was to minimize interview time and not completely sacrifice the interaction which enriched the participants' answers. One strategy was to have teachers administer the survey in class during a regular class period. All participants would answer the survey at the same time, thereby saving many hours. The teacher could make the process interactive. S/he could move through the

questions one by one, clarifying potentially difficult concepts, and being a resource for anyone who wants to ask a question.

In early February, the team decided that it was willing to invest time in interviews (as distinct from group data gathering in class) as long as they had confidence in the information that the instrument was gathering. They decided to stay with the content focus on employee involvement, even though "the measure may not be 100%." They suggested paring down the interview form and triangulating information two or three different ways in one section -- as a control on the kind of data that was being collected. They also decided to gather complete demographic information on participants.

- To have a control group -- or not

At the same time, the team was considering advice from the SPSS trainers about selecting a control group. The trainer described three options for selecting a control group:

-- randomly select a control group and test it at pre-post
-- randomly select a control group and test it at post only
-- match each member of the experimental group with a control as close to age, numbers of years in company, etc. as possible. (See Appendix B)

How to manage data collection with a control group when the data collection for the experimental group was already burdensome was a problem which the Manager of Human Resources struggled with. Of all the team members he believed most strongly that the design of the evaluation would be compromised if there were not control group.

The evaluation facilitator argued that there was value in descriptive data on the experimental group alone -- especially at this stage of the evaluation process. But it is likely that the Manager of Human Resources had a more-realistic view of what his managers would consider persuasive evidence of the benefits of the Basic Skills Program. The team never did include a control group in the evaluation activities because of the extent of the work required.

- Catching up with SPSS training

In late January, in preparation for the first training in SPSS, the Manager of Human Resources installed the tutorial program and went through it to get a basic understanding of the system. In mid-February the trainers offered their first training in SPSS to four members of the evaluation team. The trainers were not accustomed to teaching people whose knowledge of computers and statistics was limited and the result was a training that overwhelmed more than it instructed.

One of the trainers returned to Norton to provide a more-tailored, hands-on training. But the team continued to struggle to keep the coding and analysis process on track. This was the result of infrequent on-site technical assistance sessions, job changes for key people on the team, and the enormous amount of data that had already been collected, was still being collected, and needed to be coded.

- Expanding the content focus of the evaluation

The Manager of Human Resources had had some doubts about the content focus of the survey. Feedback from Donald Cichon, the measurement consultant, in early March clarified a gap in the content focus. The measurement consultant suggested that employee involvement in the organization be expanded to include employee involvement on the job. Specifically, this would mean modifying the survey questions to include items that assess if and how program participants are "more involved" at their jobs -- collaborating more, taking initiative, problem solving, etc. These items come closer to assessing job performance than the original items.

The Manager of Human Resources supported the redesign of the survey. He supported the amount of time that would have to be spent in the redesign and considered it "the cost of this kind of decision." He was interested in exploring further the "describable behaviors that support the business strategy" and in finding a way to show the company managers more specifically what they are getting from the Basic Skills Program.

Employee members of the team suggested a process for identifying which elements of employee involvement on the job should be included in the survey. They did not claim to know exactly which elements should be included. They did suggest that if a few employees answered the following questions the team would be better able to define the component parts of improved employee involvement on the job:

-- Do I want to learn other jobs? Which ones? Why?
-- How many wheels a day do I let go that I shouldn't?

-- What can I do to help to improve quality and generally support the business, and why should I do it?

The team also explored another option for defining the component parts of improved employee involvement on the job. That option was to train supervisors to document in an ethnographic way what employee involvement on the job is. This option would include supervisors in defining the evaluation criteria -- something that, along with employee input, could only strengthen the program and validate the items.

These options for involving employees and supervisors in the process of defining indicators for improved employee involvement on the job were exciting. Perhaps because these options are time consuming and build a new layer of data collection into the process, the team moved in another direction instead.

The team opted to see how the Basic Skills Program evaluation might tap into or build on the new company-wide performance appraisal process and categories. Underneath this option for expanding the survey content through overlap with the performance appraisal process lay the question: should the team be looking at performance instead of involvement? There may still be some difference of opinion among team members about the answer to this question.

- Using performance appraisal criteria

The measurement expert reviewed the performance appraisal criteria and gave the team feedback. He suggested that the team use the new performance review as a framework for new survey questions but that they break down categories further. He also assured the team that the five question areas which the team adapted from the performance appraisal, and the three levels of information asked for within each area, were conceptually elegant.

The five question areas are: improvement in your work area; morale in your work area, communication between shifts; safety; work flow. The three levels of information are: awareness of problems; action needed to correct the situation; does employee initiate some action. These new questions are correlated to the Performance Evaluation so that, conceivably, information from one system can supplement information from another. (See Appendices C, D, E and F.))

Phase III: Gathering, organizing, analyzing, and reporting the information

Gathering and organizing the data

The Process Evaluation:

In May of 1993, the facilitator convened a special three-hour meeting of the committee to address the question: What needs to be in place in the program in order to enhance the likelihood of achieving the goals? In this meeting team members reviewed a set of indicators established by the Massachusetts Workplace Education Initiative for each component of a quality workplace education program and assessed their program against those standards. They judged whether their program was within quality range for each indicator or whether an action needed to be taken to bring the component into quality range. (See Appendix G.)

The survey:

The Norton Company evaluation focused at first on the involvement in the organization of employees who were or are enrolled in the Basic Skills Program. The original plan was to collect information on employee involvement in several ways, including:

(1) an intake questionnaire for participants who are enrolling in the basic skills math class for the first time, to gather baseline data against which other data can be compared;
(2) a "maintenance" questionnaire for participants who are enrolled in the program, to collect follow-up data in regularly scheduled intervals -- perhaps every eight weeks;
(3) an exit interview for participants who have completed the program;
(4) an interview for supervisors;
(5) an interview for participants who completed the program before the evaluation was begun to collect retrospective data.

The intake and maintenance questionnaires -- those parts of the evaluation system which have been developed -- focus on whether a program participant has been asked to participate in or volunteered for a range of activities in the organization. These activities include:

- participation in teams/committees like Basic Skills, Material Waste, ISO, Safety, Total Quality Waste Team;
- involvement in customer interface projects/initiatives like giving plant tours, surveying customers, visiting other plants and/or customer sites;
- involvement in skills development projects/initiatives like college courses, GED preparation, job-related math skills, language classes;
- involvement in training projects/initiatives like cross training, facilitator training;
- involvement in special projects like community work/volunteer efforts (United Way), company-wide or team projects, special presentations;
- involvement as a trainer or a tutor;
- awards/recognition received.

The intake questionnaire also includes a self-assessment of job attitude, job knowledge, production, quality of work, flexibility, and being a team player.

Newer questions focus on involvement on the job as outlined above. More specifically:

- There is now a co-worker assessment comparable to the self-assessment. It asks the participants to rate co-workers on the same criteria they have just evaluated themselves on.
- There are five new broad questions adapted from the performance appraisal with branching questions for each area that assess the participant's awareness of problems in the area, the action needed to correct the situation, and the participant's record of taking some appropriate action. The questions are:

  -- Are there improvements which need to be made in your work area?
  -- How would you evaluate the morale in your work area?
  -- Do you think it is important to communicate between shifts?
  -- What is the last unsafe condition you are aware of?
  -- How is the work flow in your area affected by vacations or days out?

The evaluation began with gathering data from the intake interview in September 1992. Team members understood that it would take time to build up to the five-phase evaluation system they had planned. However, they did not anticipate the problems that lay ahead, keeping up with data collection and mastering SPSS.

They had planned that preliminary analysis of the early data would help to direct the next phase of the evaluation. They had anticipated that preliminary analysis of the data would shed some light on the answer to the question: does participation in the Basic Skills Program enhance employee involvement? They anticipated that long-term data collection and analysis would provide a more complete answer.

The On-site Coordinator was responsible for conducting interviews with the majority of the program participants. He was assisted by members of the Basic Skills Committee. In the summer of 1993 the On-site Coordinator coded the data on all the questionnaires completed to date and thus prepared them for programming on the computer. The On-site Coordinator was inexperienced with computers, and eventually took a course to familiarize himself with the computer functions that would permit analysis of the data he had so carefully coded.

A member of the support staff in the Training Department had been assigned the job of typing in the coded data. She had participated in the original SPSS training the previous February and was prepared to begin to work on SPSS. This person soon received a promotion and was replaced by someone who had to be introduced to SPSS.

This new person received individualized instruction from the SPSS trainer. However, she injured her back, was out of work for a while, and by the time she returned needed additional instruction. She had not used what she learned quickly enough and needed retraining. After she was retrained she typed in the data but there were still problems. The data were not typed correctly. Other responsibilities made continued work with the data less of a priority for her. At this point, the Educational Coordinator took it upon herself to clean up the data and work with the trainers to achieve a preliminary analysis.

The Educational Coordinator is a very busy person who had herself recently received a promotion. She was now responsible for overseeing the development of Basic Skills Programs in other Norton plants throughout the northeast region of the United States. She was motivated to master the elements of evaluation because she wanted to replicate the process in the new programs.

Unfortunately, she encountered a few problems when she tried to carry out her plan. The first problem was the volume of data she had to sort through. There were several iterations of questionnaires; hundreds of variables; and hundreds of respondents. The second problem was that the data were more inaccurately recorded on the computer than anyone had anticipated.

At this point the SPSS trainers might have taken over the clean-up and programming of the data. However, they continued to operate as outside resources. In retrospect, this was the result of how close to being cleaned up everyone thought the data were. These problems plagued the analysis until the last meeting.

The facilitator had developed a plan with the Educational Coordinator and the SPSS trainers to spend two days at the Norton Company finally running some preliminary analyses. Again, the data were compromised and no real analysis was possible. Problems kept popping up that took hours to solve.

These problems were all traced back to a short-cut that the On-site Coordinator had taken with the original coding of the data. He had coded the data on the questionnaires themselves instead of on proper coding sheets. This was time saving in the short run and disastrous in the long run. (The SPSS trainer had cautioned against this kind of short cut but, in the end, gave the O.K.) It meant that there was no record of the placement of the coded items other than in the computer where they were clearly compromised.

As indicated above, there is a plan to complete some analyses of the data. The Educational Coordinator will complete this work in her own time, culling what is useful for replication purposes.

Analyzing the data

The Process Evaluation

These are the seventeen components of a quality program which the team reviewed, and the actions team members needed to take to bring the component into "quality range." If no action was needed, then "No action" is stated.

Component #1: Articulate Philosophy of Program.
No action

Component #2: Develop and Implement Outreach and Recruitment Plan.
Action:
- Recruit employees with lower skills
- Tie recruitment to personal needs as well as company needs
- Involve supervisors in recruitment

Component #3: Provide Orientation
No action

Component #4: Establish Intake Procedures
Action
- Establish an intake procedure that defines a "career path" for the participant.

Component #5: Design and Implement Initial Assessment Activities
Action:
- Think through a way of assessing if learning objectives at both the individual level and level of the class are being met, and if the skills being transferred.

Component #6: Develop Curriculum
Actions:
- Review the curriculum so that it supports the goal to enhance involvement.
- Condense the curriculum and make it more Norton-specific.
- Ensure that the instructional method supports the goal.
- Continue training for instructors.

Component #7: Select Appropriate Learning Arrangements
No Action

Component #8: Develop On-going Assessment Procedures
No action

Component #9: Ensure Support Services
Actions:

- Forge linkages with higher education programs. For example, the GED program at Quinsigamond and college-level courses there.
- Think of the program as a continuum from basic skills support to intermediary support to college level survival skills, all in preparation for bridging to higher education. Joe Passeri and Kathy Rentsch can run informational meetings at Norton; others can offer support/instruction in creative thinking and problem solving.

Component #10: Staffing
No Action

Component #11: Staff Training and Development
Action:

- Continue training for instructors

Component #12: Program Planning, Evaluation, Monitoring and Management
Actions:

- Joe Passeri and Bethany Brockmeyer should meet at least once every two weeks to plan the facilitation of the Basic Skills Committee meeting
- Solicit supervisors for the Basic Skills Committee
- Add instructors to the Basic Skills Committee
- Make the meeting time of the Basic Skills Committee more convenient (For example, once a month make it earlier)

Component #13: Tracking and Reporting
Action:

- Reduce the time it takes to process recommendations to the Steering Committee.

Component #14: Fiscal Management

Component #15: Facilities

Component #16: Follow-up/Exit
Action:

- Document why people leave the program and use the information to enhance recruitment.

Component #17: The Business Education Partnership

No action

The results of actions taken from the process evaluation include:

- Supervisors have become more involved in the Basic Skills Committee
- The Basic Skills Committee has become more employee-run. Employees are making more suggestions about how to bring attention to the need for and benefits of the Basic Skills Program. For example, at a Basic Skills Committee meeting one employee suggested that the CEO for Bonded Abrasives be invited to comment on how education has value for modernization. He suggested that the comment become a paragraph in a subsequent company newsletter and that student quotes should also be added to this newsletter review.

The survey

To date, the team has been able to produce only the most preliminary analysis of the survey data. As described above, preparing for analysis has been a far more arduous task than the team members, facilitator or trainers foresaw. In summary, there are several reasons for this.

- The coding process was long and arduous. There are three versions of a survey that has many variables. Each survey required its own coding scheme.
- Changes in personnel in the training office required instructing a new person in coding and programming midway through the activities.
- The SPSS consultants live several hundred miles away from Worcester. Although we did not anticipate the distance being a problem, the distance made it impossible for the consultants to provide the hands-on support that some Norton employees required while they mastered this data-base.
- Changes in the structure of the company and in the positions of key personnel (other than support staff) who supported the evaluation made it difficult to maintain continuity of focus on the project.
- Changes in the structure of the company coupled with the amount of time that had elapsed since the evaluation began,

began to shift the perspectives of key players on the team about the most important indicators of success.

However, the team remains mostly comfortable with the goal of enhancing employee involvement, especially on the job. The Educational Coordinator said: "It (still) measures a more realistic outcome than productivity or the quality of the product." The Manager of Human Resources is not sure that involvement in the organization (beyond involvement on the job) is still a meaningful outcome.

One practical suggestion about how to speed up the analysis of the remaining data (and provide a more-simply digested set of results) is to aggregate categories in the survey into a single measure of involvement. For example, aggregate the categories "volunteered," "participated," and "tried" for Questions II A through H. "Involved" might be designated as a score of 1; "not involved" as a score of 0. (See Appendix)

Additional evaluation-related finding

Five of the eighteen to twenty people who bid to be a group leader in May 1993 were from the Basic Skills Program.

Preparing a strategy for reporting the findings

The more-active members of the Basic Skills Committee have been informally reporting the results (in the broadest sense) of the evaluation to other members of the Basic Skills Committee and other Committees throughout the company as needed. Reporting in this case is not limited to a formal written report of results of the survey. Such a thing does not yet exist and may not exist for some time. However, considerable discussion about the evaluation and its relationship to program planning has taken place and has moved the program forward.

Phase IV: Deciding what happens next

Taking follow-up action

The team decided that:

- The team has good basic information and it should be analyzed for its own sake. Start with an analysis of the demographics of the people who have participated in the program. Then proceed to a simple review of frequencies for all the variables for insights into what the program has achieved.

- The team should analyze the current data before changing the instrument to see exactly what the current instrument is able to demonstrate. The objective itself -- improved employee involvement -- may have little appeal outside the training department, unless it can be linked to more bottom-line issues. The concerns of the other managers are more directly linked to the bottom line. Is quality better? Are we producing more? Is there more of a profit? The Basic Skills Committee is faced with the challenge of demonstrating to the management groups that this program is working in terms that make sense to them. Analysis of the current data may help to clarify how address this challenge.

- If the evaluation focus on employee involvement is maintained, the size of the instrument should be reduced before being used in the future. There are too many data provided by the current instrument. While current data should be analyzed, future data can be reduced by modifying the instrument. Keep the common threads so the data will be comparable.

- The team should make better use of existing information in the company and tie this information into evaluating the effect of the Basic Skills Program. One option is to focus on participant job performance and use the data available from performance appraisals to enhance the evaluation .

- The team should involve the thirteen new businesses in Bonded Abrasives in a process of redefining the goals and objectives of the Basic Skills Program. This might mean establishing thirteen Basic Skills Committees and a mechanism to correspond among them. Opening up the process in this way will help the team to redefine the focus of the evaluation and to establish evaluation methods that can better assess if the program is helping participants do their jobs better and improve their lives.

- Supervisors should be solicited to give concrete measures of improved employee performance on the job. This information should be merged with what is learned from a review of the performance appraisal.

- The team needs to think through how to use evaluation results to improve the program.

- The team needs to specify audiences for the evaluation results and what the team wants to say to them.

Evaluating the evaluation

These are comments which team members and the evaluation facilitator made about the evaluation process:

- The Norton team should have considered hiring out certain aspects of the evaluation to consultants. Conducting a basic skills program evaluation of this scope is a big job. There comes a point when internal staff cannot extend themselves beyond their regular jobs and consultants should be used.

- More hands-on technical assistance from the SPSS consultants would have helped the team. The SPSS consultants could have set up the database, ensured that data entry was clean, and generally worked more closely with the team.

- The work of the evaluation went on for too long, losing continuity of purpose. Some of the reasons for this were not controllable. Core team members changed their jobs and this changed their roles on the team. Support staff also changed and required additional training and "catch up" time. But the timeline could have been tightened, especially by reducing the scope of the preliminary analyses. An earlier preliminary analysis might have inspired the team to go forward with the analyses in other manageable increments.

- The team agreed to continue to discuss the appropriateness of employee involvement as the central focus of the Basic Skills Program evaluation. The evaluation process has been valuable but the Manager of Human Resources is left feeling that the original instrument -- edited to include the new focus on employee involvement on the job -- is not measuring what the company wants to know about in a valid and reliable way. The Norton team redefined its evaluation focus midway through the project. In extending the focus to employee involvement on the job, the team came closer to evaluating "the competencies which are at the heart of what is needed to take the company where it wants to go." But improved job performance might be a more appropriate indicator. Discussion of these concerns should continue.

- The Educational Coordinator is pleased with what she has learned and is poised to think through how she can apply this to workplace education programs which she oversees in other plants.

IV. REFLECTIONS

Facilitator Laura Sperazi's comments:

- The Norton team would have fared better if they had collected fewer data on fewer people -- and mastered some of the fundamentals of data management -- before trying to manage several data sets with hundreds of variables in each. The general lesson to teams which is derived from the Norton Company experience is: collect information as soon as you can, then analyze it promptly; do not wait for the data to be perfect before you try to make sense of what you have. This is especially true for inexperienced teams who are just learning how to evaluate.

- SPSS is a good database program but other, more simple programs would be less intimidating for teams to use. Lotus or Data Ease are good examples of these. If team members are familiar with Lotus or other database programs they should begin by using these familiar programs for evaluation purposes and then graduate to more sophisticated programs, if needed.

- Everyone -- team members, facilitators, consultants -- need to learn to be comfortable with the slow evolution of focus for an evaluation of a workplace basic skills program. Knowledge grows along with time, staff changes, incremental opportunity to discuss items in new and different ways, and with lessons learned in other areas of work.

-

NORTON: Appendix 17

INTAKE INTERVIEW PROCEDURE

1. Explain to the participant the purpose of the Interview:

   - To determine the level of employee involvement, both within Norton and outside the company, at the time the employee begins training in Basic Skills.

   - To track the change in employee involvement during the employee;s continued career at Norton Company(6 month intervals).

2. The first page of the Interview is separated from pages 2 - 6 to keep information collected separated from the participant's name. Pages 2 - 6 are then identified numerically to maintain confidentiality.

3. Information regarding race, gender, and age requested on page ?? is provided on a voluntary basis and only used in the department; be certain to explain this to the participant.

4. Instruct the participant(s) to only fill out page one by themselves; the remainder is to be done as follows:
   - the interviewer reads the questions to the participants as he/she follows along on their own.

   - the interviewer records the participant's responses as they are given.

5. Distribute Part VII - Introduction to the Training Department - and review with participant.

6. Thank the participant for his/her help in collecting the required information. Invite him/her to contact the Training Department at ext. 2441 or 2145 for any additional training which might be of benefit, or for help in answering any questions regarding educational assistance, further education at colleges or technical schools, and career guidance.

I. EMPLOYEE INFORMATION

NAME ____________________ DATE ____________

SHIFT (circle) 1st 2nd 3rd ROTATING

LENGTH OF TIME AT NORTON ____________________

WORK HISTORY (list the jobs you have held at Norton; start with your current job first):

	JOB	DEPT./ PLANT	SUPERVISOR	DATE STARTED	DATE ENDED
1.					PRESENT
2.					
3.					
4.					
5.					

LIST OPERATIONS YOU ARE CERTIFIED ON ACCORDING TO ISO 9002 STANDARDS.

TELEPHONE: HOME ( ) ____________ WORK ____________

LAST SCHOOL ATTENDED ____________ HIGHEST GRADE COMPLETED ____________

PROGRAMS/COURSES OUTSIDE OF NORTON CO. CURRENTLY ENROLLED ____________

LANGUAGE SPOKEN AT HOME ____________

OTHER LANGUAGES SPOKEN ____________

2/1/93

II. EMPLOYEE INVOLVEMENT PROFILE

*For the following qestions (A. thru G.), please mark a __V__ beside activities you volunteered for, an **A** beside those you you were asked to participate in, and a __T__ beside an activity you tried to participate in but for reasons beyond your control could not. Please indicate the year(s) of your involvement.*

A. Have you been involved on any committees or teams?

MARK V,A OR T	***YEAR(S)***	***COMMITTEE OR TEAM***
______	__________	*BASIC SKILLS*
______	__________	*MATERIAL WASTE*
______	__________	*ISO*
______	__________	*SAFETY*
______	__________	*TOTAL QUALITY*
______	__________	*T.Q.W.*
______	__________	*TRAINING TEAM*
______	__________	*COMMITTED TO ACTION*
______	__________	*OTHER TEAMS:________*

B. What customer activities have you been involved in?

MARK V,A OR T	***YEAR(S)***	***CUSTOMER ACTIVITY***
______	__________	*GIVING PLANT TOURS*
______	__________	*VISITING OTHER PLANTS AND/OR CUSTOMER SITES*
______	__________	*OTHER:______________*

C. What educational programs have you been involved in while at Norton Company?

MARK V,A OR T	**YEAR(S)**	**EDUCATIONAL PROGRAM**
______	__________	COLLEGE COURSES
______	__________	GED PREPARATION
______	__________	BASIC SKILLS CLASSES
______	__________	CERTIFICATE COURSES
______	__________	OTHER:______________

D. What Norton training courses have you been involved in?

MARK V,A OR T	YEAR(S)	TRAINING PROGRAM
______	________	LEADERSHIP COURSES
______	________	FACILITATOR TRAINING
______	________	TRAINING VIDEOS
______	________	OTHER:____________

E. What Norton community service projects have you been involved in?

MARK V,A OR T	YEAR(S)	SERVICE PROJECT
______	______	UNITED WAY (circle) GIVER, CAPTAIN, VOLUNTEER
______	______	BLOOD DONOR
______	______	TUG OF WAR TEAM
______	______	OTHER:______________

F. What Outside Community Service have you been involved in while at Norton Company?

MARK V,A OR T	YEAR(S)	COMMUNITY SERVICE	SPECIFY DUTIES
______	______	CHURCH	________________
______	______	SPORTS	________________
______	______	CHARITIES	________________
______	______	SOCIAL	________________
______	______	YOUTH ORG.	________________
______	______	OTHER:	________________

G. Have you been involved in any of the following training activities while at Norton Company?

MARK V,A OR T	YEAR(S)	ACTIVITY
		TUTOR
		CROSS-TRAINER
		SAFETY TRAINER
		NEW EMPLOYEE ORIENTATION TRAINER
		CLUSTER PRESENTER
		TEACHER'S AIDE IN BASIC SKILLS
		OTHER ____________

H. What special recognitions have you received while at Norton?

MARK V,A OR T	YEAR(S)	RECOGNITION
		RECOGNITION LETTER
		RECOGNITION BREAKFAST
		RECOGNITION LUNCH
		TOTAL QUALITY WASTE TEAM RECOGNITION
		CERTIFICATES
		PIONEER AWARD
		CHAIRMAN'S AWARD
		OTHER:______________

I. The next four questions have to do with your continued learning at Norton Company.

1. Do you feel encouraged or supported to become more involved in the company and, if so, how?

2. Are there barriers which prevent you from becoming more involved in the company and, if so, what are they?

3. What might help you become more involved in the company?

4. Are there specific areas in which you would like to be more involved in the company?

III. STUDENT'S OBJECTIVES/GOALS

A. What are your educational goals?

B. What are your career goals at Norton Company?

A6

IV. SELF-ASSESSMENT DESCRIPTION

Please rate yourself on the six performance qualities below. (circle one)

JOB ATTITUDE:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
JOB KNOWLEDGE:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
PRODUCTION ON THE JOB:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
QUALITY OF YOUR WORK:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
FLEXIBILITY:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
TEAM PLAYER:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR

V. CO-WORKER ASSESSMENT

Please rate your co-workers on the same six qualities.

JOB ATTITUDE:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
JOB KNOWLEDGE:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
PRODUCTION ON THE JOB:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
QUALITY OF YOUR WORK:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
FLEXIBILITY:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR
TEAM PLAYER:	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR

THANK YOU FOR YOUR ASSISTANCE!

PART VI EMPLOYEE JOB INVOLVEMENT

1) Are there improvements which need to be made in your work area?

A. What improvements ought to be made to improve the work area?

B. What efforts have made to help improve the situation?

2) How would you evaluate the morale in your work area?

A. What could be done to improve morale?

B. In what way could you improve morale?

C. How have you tried to improve morale?

3) Do you think it's important to communicate between shifts?

YES - continue to A NO - continue to question 4

why A. Is it important to communicate information to the next person on your job?

B. What is the best means to communicate information to the next person on your job?

C. How have you established communication with the next person on your job?

4) What was the last unsafe condition you are aware of?

NO - go on to question 5

A. How could the situation be made safer?

B. What have you done to make the situation safer?

5) How is the work flow in your area affected by vacations or days out?

NOT EFFECTED - End of interview

A. How could the work flow be better maintained during vacation time?

B. What have you done to improve the work flow during vacations?

CRITERIA BELOW REFERS TO PART VI QUESTIONS.

Listed below are the content areas questions 1 - 5 are designed to focus on. The Criteria refers to the Performance Appraisal areas that are also evaluated in the question.

QUESTION # 1 - **IMPROVEMENT IN YOUR WORK AREA**

CRITERIA: QUALITY, CONTINUOUS IMPROVEMENT, AND INDIVIDUAL PRODUCTIVITY

QUESTION # 2 - **MORALE IN YOUR WORK AREA**

CRITERIA: CONTINUOUS IMPROVEMENT, RELATIONS WITH OTHERS

QUESTION # 3 - **COMMUNICATION BETWEEN SHIFTS**

CRITERIA: CONTINUOUS IMPROVEMENT, PRODUCTIVITY, RECORD KEEPING, RELATION WITH OTHERS.

QUESTION # 4 - **SAFETY**

CRITERIA: SAFETY

QUESTION # 5 - **WORK FLOW**

CRITERIA: FLEXIBILITY, SKILL, CONTINUOUS IMPROVEMENT, PRODUCTIVITY

Norton: Appendix B

F-203 University Park
Uptown Road
Ithaca, NY 14850
January 18, 1993

Joe Javorski
Norton Company
Bonded Abrasives Division
1 New Bond Street
Box # 15008
Worcester, MA 01615-0008

Dear Mr. Javorski,

Laura Sperazi, of Evaluation Research, recently sent us a copy of your survey instrument for gathering maintenance data on your basic skills programs. She mentioned that you would appreciate some feedback from us before you actually start the data collection. We hope you find the following of some use.

We were not quite sure of the precise questions which you hope to address with this instrument, although the 'Introduction' and 'Nature of Program' sections helped set a context. Will the workers see these two sections before responding? Including this section may bias their answers, since it suggests a set of 'socially desirable' responses. Also, we were unsure how the instrument would be administered, so some of our comments may be moot points.

In general, we liked the instrument's layout. However, we do have some comments. One of the issues researchers often must address is the confidentiality of the responses. You may want to include a separate page for the respondent's name and phone number, and indicate in a prefatory paragraph that this information will be separated from the rest of the survey prior to the coding and analysis stages. You could then put a number on each interview (on each page, in case they get separated) so you could keep tabs on who gave which answers, should this be necessary. While the respondents may realize that the information is still traceable, they should feel that there is less connection between their responses and any possible evaluation of them as workers. This becomes more important with the introduction of a control group, who most likely will not know the purpose of the study. The prefatory statement could go on a cover page, which would also state who is doing the study (i.e., is it being done under the auspices of Norton, the human resources department, is there any union involvement, or is this being done under the auspices of an outside group?).

(I) In the first part on 'Employee Information', we suggest a few stylistic changes. (1) Under work history, is the 'Most Recent Job' intended to be the current job or first previous job? If it is current, then the two previous questions on plant/dept and current supervisor's name are redundant. If it is the previous job, then you do not appear to ask what the current job is, though this information may be useful. This would also ensure that everyone answers in the same manner -- you want to avoid having some people list current job in the first slot while others put previous job in that slot.

(2) What is the line under plant/dept for? Presumably, it is a wrap-around from the previous line, but it is distracting. The responses (1st, 2nd, 3rd) need not be underlined.

(3) For the shift question, we would line up the word 'shift' with 'circle' on the left, and put the word 'circle' in parentheses and in small letters.

(4) Why is there a question mark at the end of the statement telling the respondent to list operations on which they are certified? We assume they understand what ISO 9002 standards are.

(5) The languages spoken question may lead to confusion: it could be interpreted either as asking for only those foreign languages spoken (as an English speaker might) or for all (as a foreign language speaker might). It would then be unclear whether a response of, for example, 'French' means that the person speaks English and French or that the person speaks French but does not yet feel qualified in English as a second language. This could be avoided by pointing out to include (or exclude) English. This is somewhat a moot point if they are reading the survey rather than having an interpreter read it to them, because English must be in their repertoire of languages -- as we do not know the details of the administration of the instrument, we included this comment.

(6) It may prove useful to gather information on the respondent's gender and race as well, although this is sensitive information. This would allow you to make distinctions between categories of people. For example, it may turn out that the programs create different outcomes and reactions among these groups, such as between men and women. Finding this out could then lead to appropriate changes in the programs themselves, in order to increase their utility. There may also be differences between groups in the forms of employee involvement.

While some of the comments may seem picky, respondents may get briefly confused or annoyed at this early stage, and become less willing to invest time in doing you a favor and helping you on your study. Making them as comfortable as possible pays off in the end results, and hence researchers have ended up paying a lot of attention to minute details.

(II) In part II, the 'Employee Involvement Profile', we liked the general approach. (1) The placement of the word 'year' may present problems. Since it is off to the side, and there are no slots for the answer, it may be missed by the respondent. As well, it may be useful to change it to "YEAR(S)", so that people do not feel restricted to one year. It might be useful to have two slots in front of each category, one for the 'volunteered' versus 'asked' distinction, and one for the years of involvement.

(2) Are you interested in having a category for activities which a person tried to join but was excluded for whatever reasons (e.g., space limitations, qualifying criteria)? This question may prove to be more trouble than it is worth, since it may evoke socially desirable answers, but could be of some benefit conceptually, and may be worth trying.

(3) In sections B and E, in the 'Other' response, there should be a line for the respondent to explain what they did. There are several reasons for this. One is to ensure similarity of layout over sections. Second, these are both very likely to evoke a 'yes' answer since this would be a socially desirable response. By having them describe the activity, they cannot just answer yes in some vague way. This information may prove useful in creating a new code for the analysis after the data have been gathered.

(4) In sections C, G, and H, do these questions refer to any point in the respondent's lifetime, or only while at work at Norton? Some respondents may answer one way and others in the opposite manner.

(5) In section E, will the respondents know the difference between the types of United Way activities? It may be useful to have one line for United Way, with the three types of involvement listed afterwards with an indication to circle the appropriate activity.

(6) In sections C and F, there should be an 'Other' slot, in case the respondent feels uncomfortable making use of your predefined categories.

(7) In section F, it may be useful to offer more lines, in case they are quite involved.

(8) Is it possible that a person could be asked to be involved in a program one year, and volunteer for the same program in another year? You may want to anticipate how you would code a response indicating both a V and an A (e.g., does one take conceptual priority over the other).

(9a) In section I, there seem to be several leading questions. In the prefatory comment, the statement that Norton is hoping for employees to become involved will put pressure on the respondents to find some form of involvement, even if this is not their true feelings. We would remove this sentence.

(9b) Question 1 should read, "Do you feel encouraged or supported to become more involved in the company, and if so, how?" Phrasing the question in this form will allow people who do not feel encouraged to say so. In the current form of the question, you will not be able to tell whether a blank response means the respondent has negative feelings about support or has not been able to identify mechanisms of support.

(9c) Similarly, question 2 should read, "Are there barriers which prevent you from becoming more involved, and if so, what are they?" If you are concerned that this may be perceived by a respondent as a risky question to answer (they may feel that answers which criticize the company or management may lead to some form of retribution against them), you can leave it in its present form. This way, people may have a bit more freedom to make critical comments.

(9d) A fourth question might be of use: something along the lines of, "Are there specific areas in which you would like to be more involved in the business?" This would be particularly useful with the addition of a control group.

(III) Part III seems fine. However, coding this for analysis may prove to be a bit of work (although do-able).

(IV) Part IV has a nice layout, although there is a lot of blank space staring at the respondent. Beyond filling in space, it might be useful conceptually to include a Part V, which has a layout identical to Part IV. This section would ask the respondent to rate (on average) their coworkers on the same criteria as in Part IV. This would give you the ability to see how workers view the general culture of the firm, as well as to ground the self-evaluations of the respondents against their perceived context (for example, a male respondent who views himself as having a good Job Attitude while perceiving his coworkers as having excellent Job Attitudes is a very different creature from a respondent who views himself as having a good Job Attitude while perceiving his coworkers as having poor Job Attitudes).

(V) Some additional comments. (1) Will the final version of the survey have the "sdp" in the lower left corner of the final page? Does this serve a purpose?

(2) A section of open-ended questions (similar in construction to Part III) asking the respondent to evaluate any benefits and/or drawbacks they received from involvement in the programs listed in Part II might be of some use to your study.

(3) Finally, it may be a nice touch (and one which respondents really do appreciate) to have a final paragraph

thanking the respondent for taking the time to share their thoughts.

(4) Let us reiterate that we thought the survey useful and well thought out. The questions should lead to some interesting analyses in their own right, as well as in comparison with the baseline data.

(VI) Laura Sperazi also mentioned that you had some concerns about the use of a control group. There are two reasons for gathering information from such a group. The first is to eliminate any potential biases which might result from broad changes which occur between the time of administering a program and the gathering of follow-up data (such as a recession which could lead to job security concerns). If the control group responses change in a similar manner as the experimental group, then the change is probably not due to the program itself, but rather some broader event. If the change is evident in only the experimental group, then the program seems to be the source of these changes in response. This use of a control group requires data be gathered from non-experimental respondents at both steps of the data gathering. Therefore, this use may therefore not apply in your study.

The second use is to compare the responses of the post-experimental respondents to the general set of attitudes in the population from which they may be drawn. If the purpose of a program is to bring people 'up to speed', then how close that goal has been achieved can be gauged by comparing the program graduates with other workers. If the purpose is to change the general attitudes, then the divergence between the program graduates and other workers would be of interest. Either way, this use would require gathering data on a control group as well as the experimental group.

Gathering data on a control group is fairly easy. The instrument should be identical to that given to the experimental group in order to avoid any potential biases resulting from the use of different surveys. Similarly, the survey should be administered in an identical manner. The ideal method for identifying respondents for the control group would be random selection. Such a selection technique could result by taking an alphabetized list of all workers of the appropriate ranks subject to the programs (for example, if management is not eligible for the programs, then they should be excluded from the master list). You would then select every nth person -- for example, every 20th person. The selection number would be such that the control group would be roughly the same size as the experimental group. The list should include those people who have gone through the programs, but they would be dropped and the next person on the list could be chosen. Also, if there are any other restrictions on entering the programs (e.g., by minimum or maximum age,

85

gender, or race), the list should also reflect these selection criteria.

Another method of selection, which is much more time consuming, is to match each experimental group member with a control member. This involves selecting the control person who is of the same age, race, gender, has worked for about the same amount of time in the company, in the same department, with a similar background (i.e., family socioeconomic status, educational attainment level).

The purpose of either of these methods of selection is to prevent the selection method itself from influencing the results (for example, if a single department was chosen as a control group, then elements such as departmental relations could influence the results and create an apparent difference between the control and experimental groups).

We hope that this feedback proves to be of some help. Best of luck, and we look forward to meeting you. Please feel free to call us at (607)257-7566 if there are any questions.

Sincerely,

Steven Andrews & Alice Oberfield

cc: Laura Sperazi

NORTON: Appendix C

NORTON CO PERFORMANCE APPRAISAL

EVALUATION CRITERIA	NEEDS IMPROVEMENT	GOOD PERFORMANCE	EXCEPTIONAL PERFORMANCE
SAFETY The degree to which the individual works in a safe manner, using proper techniques, equipment and protection.	Does not always use appropriate caution and procedures. Is injured as a result of committing an unsafe act, or observed committing unsafe acts.	Works in a safe manner using proper techniques, equipment and protection.	Suggests improvements to procedures or conditions to improve safety. Actively participates in safety initiatives.
QUALITY The degree to which the employee's work is neat, orderly, free of error and satisfies the customer (internal or external).	The work is sometimes less than acceptable to the internal or external customer. Improvement is needed. Pride in workmanship is lacking.	Work is consistently neat, orderly and free of error. Output satisfies internal and external customer. Rate of rework and rejections meet department goals.	Work is consistently neat, orderly and free of error. Output satisfies internal and external customer. Rate of rework and rejections consistently exceed department goals.
SKILL The ability to apply one's knowledge readily and effectively in the execution of work.	Often needs assistance with job functions. Limited in potential work assignments.	Can do the full range of the primary job requirements with positive results. Needs little or no assistance.	Ability beyond what is required in the job responsibilities. Utilizes understanding of the process to anticipate problem areas.
INDIVIDUAL PRODUCTIVITY The amount of quality work completed or produced in a timely manner. Based on measures and observations.	Sometimes doesn't display full effort. Below average results vs. team expectations.	Displays strong effort on a regular basis. Regularly performs at a level consistent with team expectations.	Proactive - takes steps to increase productivity - methods, process changes, combining operations, greater flexibility, etc. Displays extra effort and consistently outperforms team expectations.
CONTINUOUS IMPROVEMENT The degree to which the employee contributes to process improvements.	Not open to changes or process improvements. Designed to increase quality, efficiency and/or reduce cost.	Makes suggestions for improvement within his/her area of responsibility. Implements procedures that increase quality, efficiency and/or reduce cost.	Actively makes suggestions to improve the total process, increase quality, efficiency and/or reduce cost. Looks beyond own responsibilities.
FLEXIBILITY The degree to which the employee willingly accepts job interruptions - temporary assignments in another area and uses additional skills to expedite job progress.	Is somewhat rigid - not open to accept job interruptions or assignment changes. Unwilling to work overtime or change scheduled shifts if needed.	Willingly accepts job interruptions and changes to normal schedule or routine to increase customer service or efficiency. Willing to work overtime and change shift schedule.	Uses additional skills to expedite job progress. Willing and able to perform most of the essential operations in the area. Very open to schedule changes, eg. overtime, shifts.

EVALUATION CRITERIA	NEEDS IMPROVEMENT	GOOD PERFORMANCE	EXCEPTIONAL PERFORMANCE c
RELATIONS WITH OTHERS The degree to which the employee cooperates, communicates and works effectively with others–treats others with dignity and respect.	Frequently has difficulty communicating or working effectively with others. Avoids resolving conflicts with others.	Communicates and works effectively with others. Respects the feelings of others.	Works exceptionally well with others. Proactive in resolving issues directly with supervision and co-workers.
TRAINING The degree to which the individual learns new skills - accepts training opportunities. Willing to teach/share skills with others. — would split into 3	Resists learning new skills, unwilling to accept training opportunities. Has difficulty training others.	Open to learning new skills and accepts training opportunities. Willing to teach/share skills with others.	Strong motivation and desire to help others learn and/or seeks additional training internally or externally to improve personal effectiveness. ✓
MAINTENANCE OF TOOLS, EQUIPMENT AND WORK AREA (HOUSEKEEPING) The degree to which the employee exercises care in the use, maintenance, security and availability (prompt return) of company tools and equipment. Maintains housekeeping.	Work area is not left consistently clean and orderly. Tools or equipment are misused, not used as intended, or not returned promptly.	Consistently keeps a clean, orderly work area. Appropriate use of tools and equipment, including prompt return. Reports maintenance needs.	Anticipates and reports maintenance needs and follows up. Looks beyond own work area if needed to identify and address maintenance issues. ✓
RECORD KEEPING The degree to which the employee completes and maintains timely, neat, legible and error-free records.	Sometimes submits incomplete, inaccurate, illegible or untimely records.	Records are consistently maintained in a timely fashion. •Neat •Organized •Legible •Accurate •Complete	Suggests improvements, helps others. Takes extra steps to increase usefulness of records. Identifies trends-uses data. ✓
TARDINESS The degree to which the employee is on time for work and remains at work for the full shift. what about [illegible]	Seven or more occurrences of tardiness and/or leaving early without prior approval. # Of Occurrences ___	Four - six occurrences of tardiness and/or leaving early without prior approval. # Of Occurrences ___	Three or less occurrences of tardiness and/or leaving early without prior approval. # Of Occurrences ___
ATTENDANCE The degree to which the employee is present for work. Except vacation, long service day, military duty, scout leave, jury duty, compassionate leave, maternity leave and witness duty.	Six or more occurrences of absence. # Of Occurrences ___	Four - five occurrences of absence. C2 253 # Of Occurrences ___	Three or less occurrences of absence. # Of Occurrences ___

NORTON: Appendix D

DEVELOPMENT ASSISTANCE CORPORATION
410 Dover Point Road Dover, NH 03820 (603)742-6300 FAX (603) 749-0331

MEMO

TO: Laura Sperazi

FROM: Don Cichon DJC

DATE: April 5, 1993

SUBJECT: Feedback to Norton Company on Measures for "Employee Involvement On the Job"

On 3/19, Bethany faxed a copy of a set of criteria (untitled; attached, with my handwritten comments), with performance category definitions for each, and asked for my "feedback as to which would measure the involvement we are looking for." I called her on 3/22 with the following feedback:

> 1. All of their 12 criteria get at employee involvement on the job, not necessarily in the categories' descriptions themselves, but at least in the performance definitions given on a continuum in the three right-hand columns. Therefore, this looks like a very good basis for assessing their target behaviors.
>
> 2. Some of their criteria, and attendant performance descriptions, cover more than one phenomenon and might be more reliable assessment devices if broken into smaller bits. For example, the TRAINING criterion really includes three phenomena: a) learn new skills, b) accepts training opportunities, and c) willing to teach/share skills with others. I suggested they scrutinize each criterion and set of performance descriptions to look for other such multi-phenomena.
>
> 3. I asked where this set of criteria came from and how they anticipated using it. She indicated that it was from their new internal review system, which might not be accessible to the Training Department's evaluation uses for a year or more. Thus, they may use it as a framework to develop their own rating system now. I suggested that, if they do so, they consider breaking each criterion down into more specific statements, such as many of those in the Aerovox form, for self- or supervisor-ratings. This would be more time-consuming to develop, but would yield more reliable results. The criteria shown on the attached pages, however, is really quite good, and it may not be necessary to develop it much further. It depends upon the extent of development resources

> they want to put into it, and how they'll use the results (i.e., "the precision of measurement needed depends upon the uses of the information").

I asked that she let me know what they end up doing with this, just to satisfy my curiosity and bring some closure to the discussion for me. She indicated she would.

cc: B. Brockmeyer

D2

NORTON: Appendix E

May17,1993

Don,

As you will notice, the five questions devised have additional questions which are designed to ascertain differing levels of involvement.

The first level is an employee's awareness of the situation the question initially asks.

The second level (question 1A or 2A, etc.) is aimed at their awareness that something could be done to change the situation.

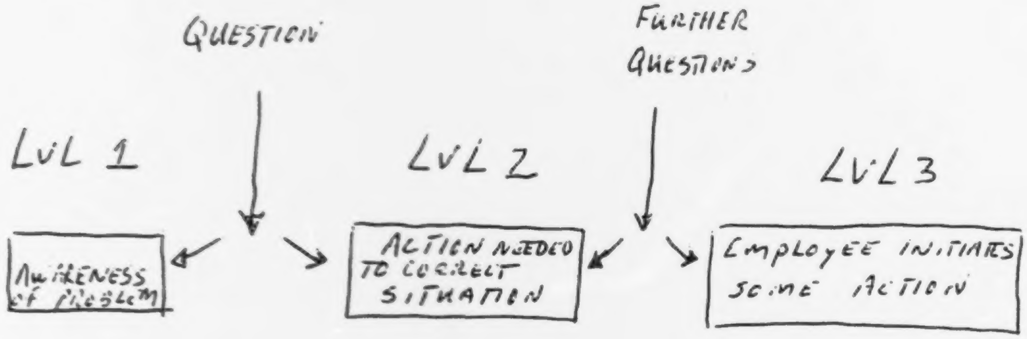
The third level (ques. 1B, 2B, etc.) asks if they have actually done anything or implemented an action to change a situation.

On some questions it is noted that a "No" or negative response ends that particular question.

The questions have a correlation to the Performance Evaluation so it could be used in relation with the Evaluation Questions. We also kept the questions non-job specific to allow for a more inclusive population given the variety of jobs we are drawing from.

I hope this gives you enough information to go on. If not, please contact me at 508 -795 -2441.

Thanks for your time.


QUESTION
FURTHER QUESTIONS
LVL 1
LVL 2
LVL 3
AWARENESS OF PROBLEM
ACTION NEEDED TO CORRECT SITUATION
EMPLOYEE INITIATES SOME ACTION

Bethany Bochmeyer

BEST COPY AVAILABLE

NORTON Appendix F

DEVELOPMENT ASSISTANCE CORPORATION
410 Dover Point Road Dover, NH 03820 (603)742-6300 FAX (603) 749-0331

MEMO

TO: Laura Sperazi

FROM: Don Cichon DJC

DATE: May 18, 1993

SUBJECT: Feedback to Norton Company on 5/17 Questions for Assessing Employee Involvement on the Job

Yesterday Bethany faxed me a set of questions they're considering adding to their Employee Involvement Profile, and asked for my reactions. I called her this morning and discussed the following:

1. In general the questions looked good. There is a certain conceptual elegance in the three-level branching, with each of the three levels indicating important information to the company and facilitating a good thought flow for the respondent. There is also methodological soundness in their having derived the questions from the Performance Evaluation categories, since that will facilitate ties of this interview information to the Performance Evaluation system for validity and reliability purposes.

2. My main concern is with scaling the responses to the questions. That is, comparability of answers will be difficult. For example, let's say morale is generally known to be poor in the packaging department because management has been considering reorganizing it, and employees therein are not sure of the status of their jobs for the future. In asking an employee question 2c), for instance, How have you tried to improve morale, one person may respond that he goes around trying to be cheery and encourage others to "keep their chins up." Another, however, may gather the group together at lunch every other day to discuss their options, try to separate rumors from facts, think out the real implications for various alternatives, pose questions to management, etc. It would seem that the two employees' positive responses to this question should not be counted equally.

   As another example of comparability problems, if in a given department there is little change, in say safety involvement, from time 1 to time 2, does that mean that there's little room for safety improvement because it is already a very safe department or that the employees are unaware of or can't think of anything to do about safety problems? You won't know just from tallying positive or negative responses to the questions.

What the foregoing concerns point to is not to abandon the new questions, but to be very careful in interpreting the responses in the context of the specific part of the plant and the conditions at the time they are asked.

The other upshot of the concerns about scaling is that I think that any numerical scale developed will be inadequate to address those concerns, and so these new questions should be used more for the insights and patterns of "grounded" examples of how employees are involved, and not so much for numerical evidence of the impact of the training program on involvement. As long as these questions are supplemental to the larger survey, then that is fine -- both purposes, a) "hard," statistical, summary evidence to management and b) realistic employee scenarios and insights, can be served.

3. Question "c" of every set, asking about what you have done, needs an outside source of verification to be considered valid. Bethany indicated using the employee performance reviews for this purpose.

Call me for further questions.

cc: B. Brockmeyer

NORTON Appendix G

Workplace Education Evaluation

Quality Indicators of Program Process

"What do you need to have in place in your program in order to achieve your goals?"

The information in the chart below stems from past evaluations of workplace education programs in the Massachusetts Workplace Education Initiative and the SABES Checklist of Indicators of Program Quality. As the information is removed from its context for the purpose of giving an overview, it is key to analyze it critically in order to determine whether or not it may apply to your program.

By *processes* we mean all the components of a program that have been developed or put into place to achieve the goals and objectives. Processes are the answers to the question: What have we done or established in order to achieve our goals ?

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Articulate Philosophy of Program	clear mission statement, goals, and approach/educational philosophy
Develop and Implement Outreach and Recruitment Plan	plan for active recruitment in company with strategies and materials appropriate to linguistic and ethnic diversityof workplace; clear statements of what program does and doesn't do
Provide Orientation	activities to orient potential participants, supervisors, and other company personnel to program
Establish Intake Procedures	appropriate assessment and goal setting with learners; referral system that links learner through program with (more) appropriate training or education opportunities

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Design and Implement Initial Assessment Activities	assessment of skills related to learner goals; assessment related to curriculum; assessment is non-threatening and confidential; assessment is at convenient times and policies are in place that facilitate participation; bilingual assistance is available if needed; assessment results in Individual Education Plan; mechanism in place to share results with learners and teachers; assessment results inform placement, curriculum development, instruction; assessment results inform referral and identify need for support services;...
Develop Curriculum	curriculum development process is documented/can be articulated by partners involved; curriculum development draws on learner need, ability, and interest; curriculum is contextualized; ...
Select Appropriate Learning Arrangements (e.g. group instruction, computer-assisted learning, etc.)	selection of learning arrangement is based on partnership need, preferences, and resources; content is based on learner goals, interests, and needs; methods, activities, and materials are appropriate for adults and reflect the workplace; classes are scheduled at times that all interested participants can attend; ...
Develop On-Going Assessment Procedures	documents learner progress toward their goals; takes place between learner and teacher; is based on clear benchmarks;...
Ensure Support Services	program provides necessary support services (e.g. counseling, transportation, childcare, bilingual assistance etc.) or links learner through program with support services in community;

Curr. + instruction. model behaviors students need to learn + which the organization desires.

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Staffing	clear job descriptions; staff selection reflects communities of participants; adequate supervision and evaluation; clear policies; opportunities for growth; ...
Staff Training and Development	pre-service orientation for staff; opportunities for staff to attend staff development activities; ...
Program Planning, Evaluation, Monitoring, and Management	has an active Planning and Evaluation Team; holds regular Planning and Evaluation Team meetings; has a program development/implementation plan; has mechanisms to solicit learner, supervisor, manager, and labor input; has an orientation for team members; has clearly defined roles, responsibilities, and decision-making processes; has documented interagency agreements; has links with other programs; has clear policies for attendance, release time, etc.; has on-going and participatory evaluation process that uses both qualitative and quantitative data to look at learner progress, program components, and organizational changes; ...
Tracking/Reporting	has ways to document learner progress; tracks workplace demographics, applications, enrollments, attendance, outcomes, and waiting lists; ...
Fiscal Management	tracks budget by funding source (e.g. release time); has accurate record systems; prepares and submits reports in a timely fashion; ...
Facilities	has adequate furnishings and space; has sufficient supplies; is handicapped accessible; is clean, well-lit, and ventilated; has photocopier, typewriter, or PC; ...

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Follow-Up/Exit	**has ways to support learners in next steps; has established links between program and further education and training; has system to contact learners after they complete/exit the program to determine reason for withdrawal and/or to track learner progress; ...**
Other QUALITY OF BUSINESS/EDUCATION PARTNERSHIP	has common language; meets regularly; ...

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Staffing	clear job descriptions; staff selection reflects communities of participants; adequate supervision and evaluation; clear policies; opportunities for growth; ...
Staff Training and Development	pre-service orientation for staff; opportunities for staff to attend staff development activities; ...
Program Planning, Evaluation, Monitoring, and Management	has an active Planning and Evaluation Team; holds regular Planning and Evaluation Team meetings; has a program development/implementation plan; has mechanisms to solicit learner, supervisor, manager, and labor input; has an orientation for team members; has clearly defined roles, responsibilities, and decision-making processes; has documented interagency agreements; has links with other programs; has clear policies for attendance, release time, etc.; has on-going and participatory evaluation process that uses both qualitative and quantitative data to look at learner progress, program components, and organizational changes; ...
Tracking/Reporting	has ways to document learner progress; tracks workplace demographics, applications, enrollments, attendance, outcomes, and waiting lists; ...
Fiscal Management	tracks budget by funding source (e.g. release time); has accurate record systems; prepares and submits reports in a timely fashion; ...
Facilities	has adequate furnishings and space; has sufficient supplies; is handicapped accessible; is clean, well-lit, and ventilated; has photocopier, typewriter, or PC; ...

COMPONENTS/PROCESSES	DESCRIPTION, EXAMPLES, POSSIBLE INDICATORS OF QUALITY
Follow-Up/Exit	has ways to support learners in next steps; has established links between program and further education and training; has system to contact learners after they complete/exit the program to determine reason for withdrawal and/or to track learner progress; ...
Other QUALITY OF BUSINESS/EDUCATION PARTNERSHIP	has common language; meets regularly; ...

TEAM EVALUATION AT PROJECT REACH: CASE STUDIES FROM TWO WORKPLACE EDUCATION PROGRAMS

Prepared
by
Paul Jurmo

Two of seven case studies in
"Team Evaluation:
Case Studies from Seven Workplace Education Programs,"
a report prepared in June 1994
by Laura Sperazi and Paul Jurmo

PROJECT REACH: CIVIL SERVICE EMPLOYEES ASSOCIATION AND THE NEW YORK STATE GOVERNOR'S OFFICE OF EMPLOYEE RELATIONS

Introduction

In 1986, the State of New York (through the Governor's Office of Employee Relations, GOER) and the Civil Service Employees Association, Inc. (CSEA) established a jointly-administered education program for state employees. Titled Project REACH, the program provides a wide range of basic skills educational services.

This two-part case study examines how two REACH sites -- one at the State University of New York (SUNY) at Stony Brook and the other at SUNY Albany -- have adapted the team evaluation concept to their particular programs. These sites differ from the other cases presented in this report, because they were facilitated not by the authors of this research but by two adult educators trained by one of the authors and another specialist in collaborative planning.

As such, their experience might be more representative of other programs in which people with limited prior experience with the team evaluation methodology are "out there on their own," trying to adapt it to their situation. For readability's sake, the two cases are presented separately, although in the early stages the two site facilitators did some preparatory work together.

SUNY at Stony Brook

I. PROGRAM BACKGROUND

In 1992, the assistant director of SUNY Stony Brook's Residence Hall Operations attended a REACH-sponsored seminar on the potential of workplace education programs. Management had concluded that approximately 25 percent of its workforce might benefit from a workplace basic skills program. In early 1993, REACH was asked to explore setting up some kind of program, presumably focusing on basic reading and writing skills. As it does at all its sites, REACH asked that SUNY set up an advisory committee which REACH staff could in turn discuss options with.

REACH consultant Muriel Medina was contracted to conduct an organizational needs analysis (ONA), to clarify educational initiatives which REACH and SUNY might pursue.

II. BACKGROUND ON THE TEAM

History of the team

The advisory committee set up at REACH's request constituted a planning team which Muriel could work with to carry out the ONA. The resulting ONA report (whose executive summary Muriel distributed in both English and Spanish) identified math, reading and writing, and ESL as educational initiatives which the department might undertake. This range of services extended beyond the "basic reading and writing" focus which management originally had anticipated for the program. It in fact came as something of a surprise to management that employees expressed so much interest in ESL, because they had had access to university-provided ESL courses for some time. However, those courses were not tailored to the specific needs of those who attended, and thus apparently didn't capture the employees' interest.

The committee decided to set up one class for the summer, a seven-week math course. It was agreed that Muriel would serve as coordinator, helping the team to set up and oversee this and possibly other courses. The committee felt that, by beginning with math, the program would avoid being seen as "just a program for the non-

English-speakers and custodians." Math would be a "crossover" course, mixing people of different language backgrounds and departments (i.e., custodians and maintenance employees). After that course, a second course on "technical communications" (i.e., reading and writing) was implemented.

After each course, Muriel facilitated a team evaluation process described below. Both courses were deemed to be a success, and it was agreed that a third course -- on ESL -- would be offered.

Stakeholders represented on the team

The advisory committee with whom Muriel worked was composed of three higher-level managers from the residence hall operations department, the union president, seven other custodial and maintenance employees, and two representatives from Project REACH (one representing GOER and the other from CSEA).

III. THE PROCESS WHICH THE TEAM WENT THROUGH

Phase I: Facilitator prepares herself and prepares the team.

Joint preparations with coordinator from SUNY Albany

The "facilitators" of the team evaluation process at the two SUNY sites were the site coordinators themselves. This fact distinguished them from the other cases profiled in these case studies. In those other sites (Bull Worldwide Information Systems, Datatec Industries, Haartz Corporation, Norton Company, and Victoria General Hospital) the facilitator role was played by "outsiders." These outsiders had considerable experience with the team evaluation methodology and a significant investment in that approach. At the SUNY sites, the coordinators had an interest in the team notion, but no real prior experience using it.

The two coordinators (Muriel Medina at Stony Brook and Carol Young at Albany) agreed that, to prepare themselves for their roles as evaluation team facilitators, they would get some extra up-front help. This help came in the form of on-site workshops and informal telephone consultations provided by outside resource persons Paul Jurmo and Sue Folinsbee.

These interactions between the two outside resource persons and the two site coordinators took the following forms:

March 1993 workshop: On March 17, 1993, Sue Folinsbee and Paul Jurmo conducted a workshop in Albany on the organizational needs analysis (ONA) methodology developed by Sue in Canadian workplaces. The workshop was hosted by Project REACH for the purpose of introducing staff of REACH-funded basic skills programs to the ONA methodology. ONA was presented as an initial step in a larger program planning cycle. ONA was a process in which stakeholders collectively examine what makes for a productive employee, how basic skills play a role (or don't) in productivity, and what initiatives a workplace might undertake to enable each employee to reach his/her potential. Participants analyzed how they might gather and analyze information in a simulated ONA. They emerged from the workshop with an understanding not only of the ONA methodology per se but of the notion of involving all stakeholders in an integrated planning process.

July 1993 workshop: By early July, Carol Young and Muriel Medina had each carried out ONAs in their respective sites. In the process, they had set in place a team planning process which they wanted to continue. Although it was still early in that process, they wanted to prepare themselves to lead their teams through an evaluation when the appropriate time arrived.

To do so, Paul Jurmo met with them in Albany on July 6th for a five-hour workshop. Carol and Muriel were introduced to the initial steps of the team evaluation process outlined below. They were challenged to anticipate how their respective teams might answer the questions of "who wants what information for what purpose?," what are the goals of the program?" and "how might data be gathered and from what source?"

Muriel and Carol shared their responses to those questions, finding that they had much in common. In the process, Carol, Muriel, and Paul built a closer working relationship, agreeing to lend each other mutual support as they proceeded with their evaluation work. It was agreed that, now that Carol and Muriel had thought through some of the initial steps of planning a team evaluation, they would be better prepared to discuss evaluation issues with their teams in the coming months.

Telephone feedback: In this preparatory period and subsequently, Carol, Muriel, and Paul had informal telephone discussions, giving each other updates and feedback as needed.

By participating in these preparatory activities, the two site coordinators "did their homework" for the work which lay ahead.

Facilitator prepares her evaluation team

As stated above, Muriel was presented with an already-existing advisory committee when she was hired to plan and coordinate the Stony Brook program. As Muriel led the committee through the organizational needs analysis, members gradually began to create an identity for themselves as active decision makers rather than as a passive "rubber stamp" group merely giving formal approval to decisions made by others.

As the planning process turned to the question of what role evaluation would play in the programs, Muriel introduced the advisory committee to this more-specific topic at a meeting on July 21st. She discussed the continuing role of the committee and the role which evaluation might play now that the summer math course was underway. She used handouts to explain (1) the advantages of a team-based evaluation over traditional "external evaluator" models, and (2) the roles team members might play.

Phase II: Planning the evaluation

Clarifying program goals

In the July 21st meeting, Muriel not only discussed the notion of team evaluation, she led the team through the step of clarifying program goals. In this case, the team brainstormed the full range of goals which might be served by REACH, rather than just the summer math course. These broad goals were identified as follows:

Overall goal: to have training be interesting and useful.

Personal development

- provide opportunity to go to promotion interviews.
- improve self-esteem.
- to make people hungry for more learning.

Work atmosphere

- meet the needs of Residential Operations.
- improve morale even more.
- create a feeling of caring.
- have better employees.
- make sure information gets to all employees.
- move toward 50% release time and 50% worker's own time.

Information/Skills

- improve productivity.
- offer refresher courses to Cleaners in Spanish as well as English.
- improve English language skills.
- improve job-related skills.
- improve job-related reading skills.
- provide opportunity to receive GED.
- offer job-related courses.

Program as a model for other workplaces*

- expand, possibly, to other departments, allowing their employees to participate if there are openings.
- share what we're doing at Residential Operations and how we've gone about it, if other departments want to model a program after ours.

* This was rated as less important compared to other goal categories.

Identifying who wants to know what information for what purpose

In the July 21st meeting, Muriel displayed three flipcharts with the headings of "Who," "What information does the person want to know?" and "For what purposes? (Why does the person want to know?" Team members brainstormed the following responses:

Who	What information	For what purposes
Supervisors	• Did they learn anything in class? • Are they able to use what they have learned?	• To make supervisor's job easier.
Person attending class	• What do they need improvement in? • Was best information given in class for their need and management's need?	• To better themselves. (It makes them feel better about themselves.) • For career advancement.
Co-workers	What information was learned in class?	• To communicate better. • To improve teamwork.
Management	How to make information from the workshop available to other workers?	• Better productivity. • Save money. • Improve self-esteem.
All employees in Residential Operations	• What was learned in class? • What levels are the courses?	• To better understand what the class was about. • To help work force. •To know if they are qualified to take the courses
Local-level union	How is the program being offered?	• Is money being spent wisely? (It will affect spending for future programs.)
Union at other levels: • Regional director • State president	Have I (local union president) done my job to see if program has been administered fairly to all?	• Budgetary and monetary responsibility.

After this exercise was over, Muriel realized that there was confusion among some team members about what was being asked in the "For what purposes" column. It appeared that some members thought this was asking "for what purposes" the course itself was being offered, rather than "for what purposes" the various stakeholders wanted to know particular information.

She concluded that, in the future, this task needs to be explained clearly to team members, particularly because this was not something any of them had ever been asked to go through before.

Designing a strategy for gathering data

On August 17th, Carol and Muriel met in Albany with resource persons Paul Jurmo and Sue Folinsbee and three others interested in learning about team-based evaluation. The meeting was structured as a day-long workshop in which the participants would, as a group, help Muriel and Carol design a strategy and instruments for gathering the data appropriate for their sites.

Muriel presented the lists, outlined above, which her Stony Brook team developed in response to the question of "who wants to know what information for what purpose?"

Carol likewise presented her list. She explained that, because her program was not yet as developed as Muriel's, she had not gotten as much input from her team about the information various stakeholders might want.

The workshop participants then reviewed sample instruments from other sites, noting which of those instruments focused on the kinds of information Carol and Muriel wanted. Carol and Muriel identified several data-gathering activities which they would like to use in the coming year. Muriel's activities are presented below. See the case study for SUNY Albany for Carol's list.

Data-gathering activities which Muriel would like to use in the coming year

Interviews with:
  -- participants in math class.
  -- their supervisors
  -- their co-workers
(These would produce information for employees and supervisors. Would prefer to do this orally rather than in writing. But might consider a "quickie" questionnaire.)

Designing data-gathering instruments

As a next step at the August 17th workshop, Muriel and Carol -- with the help of other workshop participants -- prepared drafts of the data-gathering instruments they hoped to use.

They broke into the two groups, one to help Muriel develop her instruments and the other to help Carol. As they divided into their groups, participants were urged to consider the following guidelines:

Things to consider when developing drafts of data-gathering instruments

1. Clarify what category(ies) of information* you want to gather from the source(s) you've selected.
2. For each category of information you want, brainstorm questions you want answered. Be as specific as possible.
3. Once you have developed your questions, decide:
    - -- Who would use this instrument?
    - -- From whom would the information be collected? (And how will you select those sources/informants?)
    - -- When (and how often) will you use these instruments?
    - -- When you have collected the information, how will it be organized? By whom?
    - -- Who will analyze the information once it's organized? How will they do so?
    - -- How and when would the resulting data and analysis be presented? To whom?

* "Categories of information" in this case were five types of information which the resource persons have identified as typically sought in workplace education evaluations, as follows:

What Information Do Workplace Education Evaluations Commonly Want?

1. What are the goals of the program? (What are stakeholders' expectations?)
2. What in fact is being achieved in the program (in terms of both anticipated and unanticipated outcomes)?
3. Should stakeholders continue to invest in the program?
4. What are the strengths and limitations of the program? (What factors are helping to produce positive results? What factors are inhibiting progress?)
5. What actions need to be taken to strengthen the program in the future?

The two groups then produced drafts of data-gathering instruments and plans for using those instruments. Muriel's instrument and plan are presented below. (See the SUNY Albany case study for information on how Carol designed her instruments.)

Muriel's instrument and implementation plan

Questions to ask supervisors

1. Goal-related questions:
(For those who knew about the course)
  a. What do you believe the purpose of this course was?
  b. What did you hope the course would accomplish?

(For those who might not have known about the course)
  c. Did you know about the course this summer?
  d. What do you believe was the content of the course?

2. Questions focusing on anticipated and unanticipated outcomes:
  a. What have you seen as results from your workers taking this course?
  b. What kinds of changes have you seen in your workers?
  c. What impact has it had on your work team?
  d. Which of those results did you expect?
  e. Which results were surprising?

3. Questions related to whether to continue the program:
Would you recommend that other supervisors support a course like this? (Would you recommend to other supervisors that their workers attend this course if it's offered again?)

4. Questions related to program strengths, limitations, and needed improvements:

Strengths:
  a. What was the benefit to you as a supervisor of having your worker(s) in this course?
  b. What, in your opinion, were the benefits for your workers (if any)?

Limitations:

a. How could the course be improved?

b. How could the following aspects be improved?
  - Communication about the course (to supervisors and workers).
  - Supervisors' involvement.
  - Scheduling/release time
  - Content of the course

c. What would make the course more valuable to supervisors?

d. What other basic skills courses would be helpful for your workers?
  - Reading?
  - Writing?
  - ESL?
  - Oral communication?
  - Problem-solving?
  - Others?

Implementation plan

1. First week of September: Muriel will meet with advisory committee to expand on "Who, what info, for what purpose, and how" list. Meeting will have three goals: (1) flesh out categories, (2) come up with 3 drafts of instruments for feedback, and (3) report what classes will start in fall. Committee will develop a work plan, make decisions about who will do what.

2. October.'93: Will present the analysis of data to committee in draft report and decide how to distribute results.

3. October.- November '93: Will present final report.

4. November '93: Distribute results.

Phase III: Gathering, organizing, analyzing, and reporting the information

Gathering, organizing, and analyzing the data

At the August 17th workshop, the resource persons had presented the participants with guidelines for organizing, analyzing, and reporting data. Referring to them, Muriel returned to Stony Brook to work with her team to create interview guides and questionnaires from the core questions developed on August 17th. To do so, the team referred to the "Who wants what information" flipcharts to identify what questions to ask of particular sources.

The team then gathered information from four sources: (1) participants in the summer math course, (2) workers who signed up but did not participate, (3) supervisors of class participants, and (4) union representatives.

Several team members gathered information. For example, the Director of Residential Operations distributed the questionnaire for class participants and kept track of those who returned it. One of the two class participants on the team served as interviewer, gathering data from supervisors.

As the responses from these sources were recorded, they were conveyed back to Muriel. She summarized the responses on her word processor, then circulated them back to the team to review.

In a meeting in late September, a subcommittee of the team reviewed the responses. Members coded them, cut them apart, and taped the responses on the wall under categories identified by the team. When the data had been categorized in this way, Muriel asked the team members to go back through each category and note any observations or comments they might have. She recorded their observations and asked them then to add any recommendations.

Muriel typed up the team's summary of data, comments, and recommendations in a draft final report.

Reporting their findings

The subcommittee agreed that, before disseminating the report widely, they should first present the draft report to the other members of the team. Despite being a bit nervous, each subcommittee member presented a section of the draft report to the other team members. Presentations were made on the process used, the data gathered, and the subcommittee's recommendations.

Muriel made the first of these presentations, modelling how to make a presentation for the other subcommittee members. The draft report was well received -- and adopted -- by the other team members.

It was agreed that the team would now disseminate the report to other audiences with an interest in REACH. Muriel hoped that the report would be well presented and well received, although this is something over which she could exert little influence.

Phase IV: Deciding what happens next

Taking follow-up action

Based on the positive findings regarding the first course, the team agreed to offer a second course. This course focused on "basic communications for the workplace," which dealt with job-related written and oral communications. The team went through a similar version of the original process to evaluate this 20-hour course, with team members using modified versions of the earlier data-gathering activities. (One initial interest questionnaire distributed to potential participants was printed in both English and Spanish, although it's not clear what effect adding Spanish had.) The facts that the team didn't have to develop totally new instruments -- and had already had practice gathering and analyzing data -- made the team more inclined to jump into a second round of evaluation activities.

In a January meeting, the team once again reviewed the collected feedback and agreed to offer a third course, this one on ESL. The process of organizing and analyzing this second round of data was carried out smoothly. The director of residence hall operations asked his secretary to type up a summary of the data, and team members efficiently reviewed and analyzed each section of the data in the January meeting. Team members did so as if this was now something routine and normal.

The team concluded from this second go-round that (1) learners enjoyed the instructor and the course, (2) they were now becoming a "learning community," and (3) they had developed valuable communication skills (e.g., clear and concise speech, listening, body language, clear writing of memos and accident reports, openness to geting along with others). Participants' main complaint: lack of parking made it hard to get to class.

Evaluating the evaluation

Feedback from SUNY management

According to the senior management representative on the team, the evaluation team process was very useful. He said that he initially approached the program with assumptions about course content which turned out not to fully represent the realities and interests of the workers. By involving various representatives of the workforce, he got a better feel for their needs and interests. The result was that the participants felt that the program was their program, not just another management mandate.

He acknowledged that the amount of time required upfront to put together the evaluation plan was a limitation. However, he saw that the time was well spent, as it produced positive results which are now ongoing. "You have to do the upfront groundwork."

He also sensed that some workers might have resisted the initial ONA process, but they came to see Muriel not as a spy but as a professional trying to find out what they needed.

He also feels that the advisory committee process fits in with the quality team concept now being promoted by the university. Other departments on the campus are now looking into setting up an education program. He is advising them to take the team approach and -- particularly -- do an ONA, something he sees as "an absolute necessity."

He also felt that it was useful to have a trained facilitator overseeing the process. He acknowledged that no one else on the team had the necessary background.

Feedback from the funder

The representative of the Governor's Office for Employee Relations serving on the team generally found the process to be useful. It not only helped to build a meaningful program at SUNY Stony Brook but demonstrated options which other REACH programs might adapt.

She noted that, as the team got more experience, team members worried less about the evaluation process itself. Their questions became more focused on questions vital to improving the program. Team members have taken increasing ownership for not only the process but for the education program itself. This was, of course, what REACH hoped for when it originally set up the advisory committee.

She concurred with the senior manager's concern about the amount of time which the team spent to plan the evaluation rather than focusing more directly on implementing the course. She felt that this planning time could be reduced. This would be particularly important in other sites which wouldn't have the luxury of having a trained facilitator to do the "handholding" necessary to do detailed planning of evaluation activities.

She felt that the facilitator was skilled in summarizing points and otherwise keeping the team meetings running smoothly and on target. The process opened up to team members the idea of letting members' voices be heard. The process gave members an opportunity to participate. It remains to be seen whether this experience will have an impact on the larger organization.

REACH will be exploring how this process might be adapted to other sites. As a funder, REACH needs clearer information about program impact across sites. It is not clear as yet how site-level teams might respond to this funder need. REACH might eventually do a centralized training of its site coordinators, focusing on needs and options in the area of evaluation.

Feedback from the facilitator

The team facilitator said that she would most definitely continue to use a team approach in her workplace education work. If she has the choice, she would prefer to work only with team-oriented programs.

She found the process to be essentially sound and would make only minor adjustments to streamline and refine the process. She would like, for example, to find ways to get evaluation findings out to a broader audience, including potential program participants in particular.

She was pleased to find that, despite limitations of time and prior experience, team members were able to grasp the tasks they faced and carry them out. This suggested that they had taken ownership for the process and felt that the team gave them an opportunity to have their voice heard and play meaningful roles.

She advised facilitators to be careful, on one hand, not to overwhelm newly-formed teams with tasks they can't handle. However, on the other hand, facilitators shouldn't underestimate team members. If given encouragement, members are able to stretch themselves and try out unfamiliar tasks like interpreting data, jotting comments on yellow "sticky notes" and organizing them on the wall, using flipcharts, making presentations to a group, and so forth.

She acknowledges that someone with experience and time is needed to facilitate such a process. The fact that few workplace educators currently have such experience or time might make transporting this process from site to site difficult. She felt that her own upfront training in this process helped her avoid pitfalls.

The facilitator also noted:

- Given the fact that the potential clientele for the program included many non-native-English-speakers, extra efforts needed to be made to have that population represented on the team.

- Facilitators should also provide meaningful roles for members all the way through the process, not just in a few initial activities.

- Top-level management can do a lot to make or break a team. If they are willing to try sharing decision-making with others, the process has that much more chance of succeeding. Conversely, autocratic managers can block or destroy the team process. One advantage of a team: an autocratic or otherwise uncooperative member can be countered by the rest of the team.

- Teams should be flexible about who serves as members. If someone consistently cannot attend meetings, the team should find out why. If that member is simply too busy, he or she might have to delegate a stand-in or step aside and let someone else serve. If that member is not coming for some other reason, the team should ask why and try to deal with whatever is inhibiting participation.

- Teams also need to encourage members who are shy or not fluent in English to participate as fully as possible rather than be relegated to a secondary role.

IV. REFLECTIONS

Paul Jurmo's comments:

- Despite some initial miscommunications with management about her role and what the education program might achieve, the facilitator persisted and carefully and systematically carried out the ONA and evaluation process. She was fortunate to have a team which had the right mix of leadership, patience, time, and willingness to try new roles. The team, in turn, was supported by their state-level funder, who made it clear it was interested in seeing how both the education program and the team process worked. As the team got more experience, they became more comfortable with the idea of running their own evaluation and education program. As such, the SUNY Stony Brook case demonstrates many of the elements required to make a planning and evaluation team work.

- REACH had hired the facilitator to help get a program up and running. Its policy was to hand control of the program over to the site advisory committee. As the Stony Brook committee now makes that transition, it is faced with the question of "what next?" That is, will the team be willing and able to carry on some version of the team planning process, especially with a new program coordinator with no prior experience with this approach?

- The state funder is also faced with the challenge of figuring out whether it might adapt parts or all of this evaluation model to its own evaluation needs at the state and site level.

SUNY at Albany

I. PROGRAM BACKGROUND

CSEA and GOER -- through Project REACH -- agreed in fall of 1992 to establish a workplace basic skills program for custodial workers at SUNY Albany. REACH hired workplace education specialist Carol Young to plan and coordinate the program. When she was scheduled to begin the planning process in March 1993, Carol participated in a workshop conducted by Sue Folinsbee (of ABC CANADA in Toronto) and Paul Jurmo (of Literacy Partnerships of East Brunswick, NJ) on the "organizational needs analysis" process developed by Ms. Folinsbee. (See Phase I below.)

Carol Young used this methodology to analyze how custodial workers used basic skills on their jobs. She concluded that, for their current jobs as presently structured, they had limited need for reading, writing, and math. When she presented her findings to the advisory committee, it was agreed that the basic education program not focus so much on specific job-related uses of reading and writing since few such applications existed. Rather, learners would develop skills through practice applying them to whatever reading and writing tasks were of interest to them. While some of these might be taken from their current jobs, many of them would, presumably, come from contexts outside their immediate jobs.

In early October, the 10-week program got underway. The curriculum followed a "whole language" approach. It focused on helping learners develop their own strategies for dealing with print rather than mastering "skills" defined by others. Classes were taught by two instructors from a local adult basic education center.

II. BACKGROUND ON THE TEAM

Stakeholders represented on the team

Because it is a joint labor-management effort, REACH requires each of its sites to be overseen by a committee composed of a mix of management, union, and worker representatives. This was also the case at SUNY Albany, where the coordinator was provided with a team composed of state-level representatives from CSEA and GOER, frontline workers from day and night shifts, a few learner representatives, a higher-level manager, a supervisory janitor, and one representative each from the Employee Assistance Program and SUNY's central headquarters.

III. THE PROCESS WHICH THE TEAM WENT THROUGH

Phase I: Facilitator prepares herself and prepares the team.

Joint preparations with coordinator from SUNY Stony Brook

As at SUNY Stony Brook, the "facilitator" of the SUNY Albany evaluation team process was the site coordinator, in this case Carol Young. This fact distinguished both sites from the other cases profiled in this study. In those other sites (Bull Worldwide Information Systems, Datatec Industries, Haartz Corporation, Nortoncompany, and Victoria General Hospital) the facilitator role was played by "outsiders." These outsiders had considerable experience with the team evaluation methodology and a significant investment in that approach. At the SUNY sites, the coordinators had an interest in the team notion, but no real prior experience using it.

The two coordinators agreed that, to prepare themselves for their roles as evaluation team facilitators, they would get some extra up-front help. This help came in the form of on-site workshops and informal telephone consultations provided by outside resource persons Paul Jurmo and Sue Folinsbee. (For details of what happended in those workshops and consultations, see "Joint preparations with coordinator from SUNY Albany" under Phase I of the Stony Brook case study which precedes this one.)

Facilitator prepares her evaluation team.

Carol had been presented with an already-existing advisory committees when she was hired to plan and coordinate the program. As she led her team through the organizational needs analysis, the committee gradually began to create an identity for itself as a group of active decision makers rather than as passive "rubber stamp" groups merely giving formal approval to decisions made by others.

By July, Carol's team had spent most of its time figuring out how to pull together a program incorporating the recommendations of Carol's ONA. Little time was given to the question of evaluation other than to acknowledge that, at some point, an evaluation would be done. Carol even prepared an introductory exercise in which team members would do basic planning of their evaluation, but the team didn't have much time to focus on those activities.

Phase II: Planning the evaluation

Clarifying program goals

Despite being distracted by the tasks involved in getting the program up and running, Carol was in a July team meeting able to get them to pay attention to some evaluation-related questions. She got the team to brainstorm what they felt the program should focus on. They identified reading, writing, and GED preparation as the focal points of the program. They did not require that the program be particularly job-related.

This limited goal statement can be compared with the more-comprehensive list of tentative goals which Carol had identified in her July 6th workshop with the SUNY Stony Brook coordinator. At that time, she felt that the program might:

1. Help non-readers to read.

2. Help participants identify educational goals and get on a path toward those goals.
3. Establish ongoing computer-assisted instruction at SUNY.
4. Establish ongoing study groups facilitated by learners.
5. Reach every shift.
6. Establish a model for working with REACH sites.
7. Develop a replicable model.

(In October, Carol noted that, despite these early negotiations about program goals, some team members still weren't clear as late as October what the program was to accomplish. This confusion, she felt, was due to the fact that the program had first been talked about as a job-related program, but the ONA had indicated that workers used little reading and writing on their jobs. The committee had then agreed to let the program take a broader focus, but apparently some team members didn't really catch on to -- or buy into -- the ONA's findings and continued to assume that the focus would be job-related reading and writing.)

Identifying who wants to know what information for what purpose.

Because for much of the program cycle the team was focused almost exclusively on getting and keeping the program going, it team did not get around to the details of mapping out an evaluation strategy. Carol thus never got their input about the question of "who wants to know what information for what purpose?"

She held in reserve the tentative list she had brainstormed on July 6th. This tentative list was as follows:

Who	What Information	For what purposes
• SUNY Central • EAP Coordinator • Upper-level mgt. -- Director -- Asst. director • Union leadership • Mid-level mgt. (Dir.of Maintenance) • Supervisors -- Custodial -- Maintenance • Participants • Co-workers • In Albany: -- GOER -- CSEA • Ed. consultant	• Do they like class? • Do they buy in and continue? • Beyond this program, will they continue with other education (what support should we provide?) • Has their self-esteem improved? e.g., ... as a learner ... self-confidence ... self efficacy e.g., handling stress, taking risks. • Can this model be "exported"? • What are individual's goals? Do individuals achieve their goals?	• To document curriculum's successes (what works). • To decide REACH's future directions. • To clarify participants' personal goals and clarify paths to meeting them.

Designing a strategy for gathering data

Carol went ahead and mapped out a tentative strategy for collecting the information she anticipated the team would want. She did so in the August 17th workshop described under "Designing a strategy for gathering data" in the SUNY Stony Brook case study.

With input from other workshop participants, Carol developed the following list of data-gathering activities she hoped to use:

Possible data-gathering activities
to be used at SUNY Albany

- Observation (and videotaping) of student presentations at graduation.
- Pre- and post- interviews with learners.
- Something for a group of supervisors. They would evaluate program and/or clarify initial goals and follow-up at end of program.

In presenting this list, Carol explained that, because her program was not yet as developed as Muriel's, she had not gotten as much input from her team about the information various stakeholders might want.

Designing data-gathering instruments

As a next step at the August 17th workshop, Carol and fellow coordinator Muriel Medina -- with help from other workshop participants -- prepared drafts of the data-gathering instruments they hoped to use. (For details of how this was done, see "Designing data-gathering instruments" in the SUNY Stony Brook case study.)

Carol held onto those draft instruments for several months until her program reached a point toward the end of the instructional cycle when the team was ready to turn its attention to evaluating the program. At that point -- in November -- Carol presented to the team her ideas for a series of questionnaires (for students and supervisors) and interviews with students. Team members reviewed the questions she had prepared for those activities and suggested adjustments. With that input, Carol firmed up the data-gathering activities described under Phase III directly below.

Phase III: Gathering, organizing, analyzing, and reporting the information

Gathering, organizing, and analyzing the data

As stated earlier, as classes got underway the project committee focused most of its energies on organizing and supporting the classes. Some data-gathering was done in the beginning weeks for the purposes of assessing learner interests. This was done through pre-program interviews conducted with individual students by instructors.

The idea of evaluation was introduced to supervisors in a "sneak preview" session in October before classes got underway. Supervisors and potential participants were brought into the classroom and participated in a sample class. At that session, the supervisors and potential participants were told they would be consulted toward the end of the program, to get their feedback.

At the end of the instructional cycle, Carol disseminated a questionnaire to students and supervisors to ask for their feedback on what was accomplished and how the program might be improved. Instructors also met with individual students or pairs of students to get feedback via interviews.

Learners also gave feedback to team members at the end-of-program graduation ceremony. Several learners made presentations about the benefits they had accrued in the program. One such benefit was having the opportunity to revise the forms they have to use on the job, to make them more usable.

Carol compiled the results of these end-of-cycle activities, finding that, in general, participants liked the class, as it got people into a positive learning situation while increasing learner confidence. This was less true for lowest-level learners, who apparently felt that the class was above them. In their feedback, learners also indicated an interest in a GED-preparation class.

Reporting the findings

Carol presented the results of the end-of-cycle data-gathering at a team meeting in January 1994. One team member questioned whether the feedback given by learners to instructors was colored by learners' reluctance to say anything critical to the instructors who had tried to help them.

The team's make-up was in flux at this stage, with the learner on the team being replaced. This sudden injection of a new member disrupted the continuity of discussion about the program.

Phase IV: Deciding what happens next

Taking follow-up action

Because the findings indicated that the learners at SUNY-Albany might need other learning opportunities (ranging from tutoring for lower-level learners to GED classes), program administrators have arranged to have a REACH-sponsored Learning Resource Center available to all state employees in the area, including participants in the SUNY-Albany program. This would allow state employees of all skill levels to pursue educational opportunities beyond those offered at specific worksites.

The team also agreed to continue meeting as a team and carry out planning and evaluation activities in the future. At this writing, it was unclear just what the program would consist of in the future, so specifics of planning and evaluation activities were not known.

Team members did agree, however, that in future evaluations team members other than the instructor would be in charge of interviewing students. This would deal with the possibility that learners would be reluctant to give critical responses to their teacher.

Evaluating the evaluation

Looking back at the above evaluation process, Carol Young identified a number of positive aspects of the team process, including:

- The attempt to introduce a team planning process and to get the team to focus on evaluation questions was useful. It gave an opportunity for some members to get involved in the program in a way they might not otherwise. For example, one supervisor became the team's "workhorse," making sure things were done.

- Instructors saw that Carol was interested in their opinions and felt free to talk with her about concerns and suggestions for concrete steps to improve the program.

- The idea of inviting feedback from supervisors was a good one, as it involved an important category of stakeholders who might otherwise have been overlooked.

- Interviews proved to be a useful way of getting feedback from learners, too, better than reliance on just an end-of-cycle "smile sheet."

- The team process allowed various interest groups who might otherwise not have communicated due to intra-organizational politics to work together around a common concern.

- Having a team member from the funding source (REACH) was useful in that it kept team members alert and positive.

Carol felt that the process was, however, limited by a number of factors, including:

- The fact that it was a 20-hour course, and thus no one had a lot of time to give to evaluation per se.

- The make-up of the team fluctuated, with members coming and going due to changing management priorities.

- Asking for feedback from those involved in the program can be frustrating if higher-up decision-makers are not ready to listen to and respond to that feedback. For example, learners became frustrated when they made suggestions for improving the forms used on the job, but administrative guidelines didn't allow those suggestions to be easily implemented.

- The program had several false starts, resulting in lack of clarity about program objectives. The evaluation team had to contend with these different expectations, making it hard to focus. In the future, programs should be run by a team from the start. The team would begin with an organizational needs analysis which would show what needed to be done. The team would also set ground rules about the need to avoid arbitrary decisions, quick changes in membership, and other important issues.

- Teams need to be aware that work organizations often have internal politics which can lead people to criticize the education program when they are really angry about something else entirely.

Carol also noted:

- While the team evaluation idea and process are fundamentally useful, the process has to be made easy enough for members to really use. For example, it might not be realistic to expect team members -- who have limited time and expertise -- to go through the full process of designing data-gathering instruments from scratch.

- This approach to planning an employee education program is likely to work best in organizations already committed to team planning.

IV. REFLECTIONS

Paul Jurmo's comments:

- Putting together a team evaluation in this site was not easy, as the facilitator was presented with a team which had not fully agreed on the program's purposes or on basic groundrules for operating as a team. The program was also conceived as a short-term pilot project, and the team was not prepared to invest a lot of time in details of planning an evaluation.

- She was thus forced to do a lot of the work of planning data-gathering activities herself. The danger in such a case was that the activities she planned might not really capture the interest of other team members and they wouldn't pay much attention to the information generated. Despite these limitations, the facilitator persisted and was -- with technical assistance from others experienced with team evaluation -- able to pull together some evaluation activities which produced information of use to the team.

- The SUNY-Albany facilitator noted that facilitators in other evaluation teams need to make the process as smooth (efficient, easy) as possible. One way of doing so would be for the facilitator to come prepared with basic frameworks for various instruments into which members can plug specific questions.

REACH

APPENDIX A

Technical Mathematical Skills Course

Evaluation Report

Prepared by

Project REACH—Stony Brook Advisory Committee
Division of Residence Operations
State University of New York at Stony Brook

and

Muriel P. Medina
Workplace Education Consultant for the
Governor's Office of Employee Relations
and the
Civil Service Employees Association, Inc.

October 7, 1993

Contents

Page

I. Introduction 1

II. Evaluation Strategy 1

III. Findings 1

IV. Analysis Comments 4

V. Recommendations 4

VI. Director's Comments 5

Appendices

A. Results of Participants Survey 6

B. Results of Supervisors Interviews 9

I. Introduction

In March and April, 1993 an Organizational Needs Assessment (ONA) was conducted at the Division of Residence Operations to:

1. determine the basic skills upgrading needs of Custodial and Maintenance workers,
2. identify other communication issues that needed to be addressed, and
3. identify critical factors which could have an impact on the success of any basic skills programs offered.

Based on the results of the ONA, the Project REACH—Stony Brook Advisory Committee decided that the first course offered to Custodial and Maintenance employees should be basic mathematics.

The Governor's Office of Employee Relations (GOER) and the Civil Service Employees Association, Inc. (CSEA) contracted with BOCES 2, Suffolk County, to deliver a Technical Mathematical Skills course. The seven-week course was held during July and August, 1993. Fifteen employees completed the course.

II. Evaluation Strategy

In meetings in July and September 1993, the Project REACH—Stony Brook Advisory Committee agreed it would conduct a team-based evaluation to look at the success and the impact of the Technical Mathematical Skills course.

The Committed decided to collect information from three groups of people:

1. participants in the class
2. workers who signed up for the class but chose not to participate
3. supervisors of participants in the class.

Team members gathered information in three ways:

- a survey of class participants
- an informal survey of those who chose not to continue in the class
- interviews of the supervisors of class participants

The survey of class participants was sent out from the Division Director's office. The Division Director also conducted the informal survey of those who chose not to continue in the class. Three members of the Advisory Committee conducted the supervisor interviews.

The information was gathered during September 1993. On September 29, those involved in gathering the information met to organize and analyze the findings, and develop recommendations. On September 30, a draft report was presented to the entire Advisory Committee, with the Committee making additional analysis comments and recommendations for this final report.

III. Findings

Following is a summary of the information gathered. (For a complete listing of the survey and interview responses, see Appendices A and B.)

Results from Survey of Course Participants

1. *What were your personal goals for the Technical Mathematical Skills class?*

   Most goals were related to improving math skills. Other goals were self improvement and to improve how they did their job.

2. *What were you hoping to achieve that you didn't?*

   Most achieved what they had hoped. Some wished the course could have been longer and that the instructor could have spend more time on fractions and decimals. Others spoke of further educational goals that could not be met in a single course.

3. *What did you achieve that you weren't expecting to?*

   Many participants improved their math skills more than they had thought they would. Some mentioned specific skills such as multiplication, fractions, ratios, and solving problems. One participant had not expected to receive a good score in the class but did.

4. *What are the two most important things that you learned in the class? Why are these things important to you?*

   Several participants described specific skills such as measuring, figuring square footage, doing multiplication, working with fractions, taking care of time sheets and checking on one's paycheck. One participant talked about the importance of continuing education and being more confident. Another felt one of the most important things was how class participants worked to help each other and pull together as a unit.

5. *What things did the teacher do in class that helped you learn the most?*

   Participants felt that the teacher's patience and his willingness to answer questions were very helpful. They also appreciated his consistency and his ability to explain difficult areas in simple terms.

6. *What can you do now that you couldn't do before?*

   Specific skills mentioned included:

   - ratios
   - measurement in inches
   - read the fractions on a ruler
   - finding the area of a room and the circumference of a circle
   - multiplication and fractions
   - new methods of solving problems
   - checking time sheets and paycheck amounts

Others stated that they are able to compute faster and are better at applying their math skills to work situations.

7. *Did you learn how to apply the math skills to your job?*

   Most said yes. One participant said no.

8. *Have you changed as a result of being in class? How?*

   Several participants felt better about themselves and about their ability to learn. Others said they were able to do their jobs better. One participant commented on how the people in the class pulled together to help each other understand the problems. Two people said they had not changed as a result of being in the class.

Results from Survey of Those Who Chose to Not Continue in the Course

The Director sent a letter to each member who had initially signed up for the course but did not attend any of the classes, to determine the reason. There were seven workers in this category. Of the five workers that responded, each indicated that they did not know the classes would be held on Mondays and they had planned to take annual leave on Mondays during the summer.

Results from Interviews with Supervisors of Course Participants

1. *What kind of changes have you seen in your employees who completed the Technical Mathematical Skills course this summer?*

   Although several supervisors had not noticed changes yet, others reported specific improvements in using measurements, both in the trades and in measuring custodial chemicals. Two supervisors said that those who took this math course are looking forward to attending other classes, and one supervisor commented that those who took the classes were more self-reliant and confident on the job.

2. *Are they able to apply what they learned to the job?* and 3. *Did it improve the employees' capability to do their job?*

   Custodial supervisors said that participants are better able to measure and mix chemicals properly. Maintenance supervisors noticed that class participants were now able to figure out square footage and apply this knowledge to planning materials for jobs. Another supervisor noticed an improvement in doing time sheets.

4. *What impact has the math class had on your department/work team?*

   Several supervisors noticed that the new skills and self-confidence gained made for more productive workers who can work independently more often. One supervisor noted that it had an invigorating effect on their work team. another said that the person who had taken the math class was now able to help others measure and plan jobs. Three supervisors mentioned that it had generated interest in future classes. Five supervisors either noticed no impact or did not respond to the question.

5. *What, if anything, wasn't achieved that you hoped would be?*

   This question was unclear and supervisors had difficulty responding to it. Therefore, the Advisory Committee discarded the question.

6. *What were any unexpected outcomes?*

   Supervisors had not expected the high level of interest in taking future classes. One supervisor commented that the employee had learned more than she thought he would. Another unexpected outcome was seeing that the closer working relationship developed among some class participants carried over to the job.

7. *Do you have any suggestions about future courses?*

   Suggestions for specific classes were given as follows:

   - math (5) (advanced math and also basic math again)
   - reading comprehension (4)
   - ESL (3)
   - communications (2)
   - teach class in not only English but Spanish
   - More trade-oriented courses

IV. Analysis Comments

After analyzing the findings, the Advisory Committee made the following observations:

- The class definitely helped people in their jobs. They are applying the math skills they learned to their jobs. As a result, cost savings result from less waste of materials such as chemicals, floor tiles, and wiring. When there is less waste of materials, we are better able to properly stock materials. In addition, safety conditions in using chemicals are improved.
- The program has captured individuals' attention and broadened their horizon. People saw the class work as a challenge, and they did it. Participants in the class told others what the class was like and, as a result, people are interested in future classes.
- The evaluation shows the importance of having a good instructor.
- At first people were quiet and didn't talk much in class. But as the class went on, people asked more questions. People started realizing, "Hey, it's safe to get involved here!" The habit of asking questions in class also spills over into asking questions in the workplace. The supervisors on the Advisory Committee felt that is good because, if people don't ask questions on the job, supervisors don't know what they need or what they are thinking about.
- Learning new skills was a confidence builder. Increased self-confidence impacts other behaviors such as:
  - asking questions
  - helping others at work
  - willingness to try and/or learn new tasks
- When people improve their skills, it makes everyone's job go faster. The evaluation also showed that people are starting to work better as a team.
- There is, however, a definite cost to having that many people out for class and for two hours at a time. We were finding a lot of work wasn't getting done because people were in class. This should be less of a problem in the Fall because people will only be in class for one hour of work time; the second hour will be on their own time.

V. Recommendations

Based on the findings of this evaluation, the Advisory Committee developed the following recommendations.

Fall Courses

1. Offer a Technical Communications Course that focuses on job-related reading and writing skills. Offer the course for two hours, twice a week, beginning the week of October 18 and continuing through the third week of December. One hour of each class will be work time and one hour will be employee time.
2. Continue to explore interest in a job-related ESL course. If there is enough interest, the course could begin a few weeks after the Technical Communications Course begins.

Getting course information out to employees.

1. Emphasize that the courses are *job-related*.
2. Have written communications about the courses come from Fred Tokash and Phil Santella. This would show the union's support, encouragement, and active involvement in Project REACH—Stony Brook.
3. Include examples of participant and supervisor responses from this evaluation when marketing the up-coming Technical Communications course.
4. Note that the ESL course (if offered) has a bilingual teacher.
5. Supervisors could ask employees who speak both English and Spanish to encourage other Spanish-speaking employees to take the ESL class.

Making sure the courses are job-related.

1. Have the instructor meet with supervisors to get input about what should be included in the course and find out their current needs as supervisors.
2. The instructor could meet employees and talk about what the Technical Communications Course will include. She could also explore interest in an ESL course among Spanish-speaking employees.

VI. Director's Comments

First, I want to thank each of you for participating in the process to identify the types of training you thought were necessary to enhance productivity and increase your potential for promotion. I also want to especially thank those who attended our first course and, by their critiques, helped us to identify where we did well, and where we could improve on our next course offering.

Back in early July, the Advisory Committee met to establish the goals we wanted to achieve with this course. The overall goal was to have the training interested and useful. Personal development goals were to improve self-esteem and make people hungry for more training. Work atmosphere goals were to meet the needs of Residential Operations, improve morale even more, create a feeling of caring, and have better employees.

As I read the critiques from both the students and the supervisors, and compared them to the goals established, I think we really hit a "home run" on this program. With your continued support, we can keep our hitting streak alive with our next courses.

APPENDIX A

Results from Survey of Participants in Technical Mathematical Skills Class

1. *What were your personal goals for the Technical Mathematical Skills class?*
    - 85%
    - To brush up on past skills.
    - To refresh my memory on things forgotten.
    - To tell the truth, I didn't get any special goal about it. I just thought that the course could help if I had to go to Maintenance.
    - To learn how to do my job better.
    - My present position involves inventory, storage, storeroom records, receiving and distribution, requisition transactions, etc. My personal goals were to enhance my math knowledge.
    - To better my math skills.
    - To improve on math that I hadn't used in years.
    - To see how much mathematics skills I need and how it can help me.
    - I went to improve my mathematical skills and better perform some of my tasks.
    - To try and improve myself.
    - I want to learn because I did not learn much schooling when I was a child because I was a child born out of abuse.

2. *What were you hoping to achieve that you didn't?*
    - I hoped they could have been longer. My skills needed help.
    - My achievement was fulfilled.
    - I would like to become a surveyor. For that was my profession in my country (from courses taken). I cannot. But, at least I could work in Maintenance.
    - Nothing.
    - I did achieve what I was hoping.
    - I achieved what I'd hoped for and more.
    - My multiplication.
    - I am still looking to achieve high school.
    - I wish the instructor could have spent more time on fractions and decimals.
    - Refresh my mind in addition and subtraction of decimals and how to track my time sheet.
    - No response (2)

3. *What did you achieve that you weren't expecting to?*
    - I can do the times table better and think better in class than years ago.
    - I learned a few more things from the Technical Mathematical Skills class. Then I reviewed fractions and others. I really didn't expect it.
    - Have a good score in the class.
    - I learned more than I thought I would.
    - I did not expect the course to present math problems such as ratios, measurements and dealing with improper fractions; however, I was pleased to have achieved solutions.
    - I learned about math that I couldn't figure out in school years ago.
    - I achieved how to do all kinds of math that I never had before. (2)
    - To understand a little better to solve certain problems that I thought difficult at the time.
    - No response.

4. *What are the two most important things that you learned in the class? Why are these things important to you?*
   - The two things I learned are (1) measurement in inches and (2) rounding off hundreds.
   - 1. That we worked to help each other understand better. 2. The instructor seemed to care that we learned for ourselves. These things are important because they pulled us [together] as a unit.
   - 1. The importance of continuing education. 2. Being more confident and challenging.
   - 1. How to take care of my time sheet. 2. How to check on my paycheck.
   - I learned about fractions and multiplying and they help in my work.
   - I cannot pinpoint just two things. The whole class was important to me.
   - I learned how to do math better so I can do a better job.
   - Measurements. It relates to my job.
   - Square footage, because I like to build things in my spare time.
   - No response (2)

5. *What things did the teacher do in class that helped you learn the most?*
   - Took time to explain things to me. (2)
   - He encouraged you to ask questions if you didn't understand and would help you.
   - He used some examples and he was very patient.
   - Being consistent and approaching everything in the most simplest terms.
   - Teacher was right with us all the time and answered all our questions.
   - He used some examples and he was very patient.
   - If we didn't understand a problem, he showed us another way to do it so we could understand.
   - He showed us how to work the problem and then he explained it to us.
   - The instructor was willing to spend extra time if you didn't understand any math problem.
   - About measuring the length of a room and about the measuring (?)
   - No response (2)

6. *What can you do now that you couldn't do before?*
   - Ratios.
   - Measurement in inches.
   - Read the fractions on a ruler.
   - Have a better time understanding.
   - Compute faster, understand a great deal more and apply situations in my work place better.
   - Use an easier way to find an area of a room and the circumference of a circle.
   - Multiply and fractions. (3)
   - New methods of solving problems.
   - Check on my hours and money in my paycheck.
   - No response.

7. *Did you learn how to apply the math skills to your job?*
   - Yes (9)
   - Some part of the math skills had to do with some job parts.
   - Yes, it was the most important thing for me.
   - No
   - No response

8. *Have you changed as a result of being in class? How?*
   - Yes. Not only did I remember things taught in high school, I was also taught new materials. The class was very interesting.
   - Having already some skills, reading newspapers, working with my son on his homework, preventing me from making change. I just got a little improvement. Thank you!
   - Yes, I can do my job better.
   - I am working at it. I am finding myself constantly trying to improve limited space and be more effective.
   - I changed my thinking in the last year, but the learning skills class really helped me feel that I gained. I also plan to further my schooling and plan to become a paralegal. I know I have the time to do it because I stopped all my bad habits for a long time, and I will put everything I can to good use.
   - Yes. I can measure liquids and find length easier. Also, I saw how we all pulled together to help each other understand problems so we each could better ourselves.
   - I feel better about myself that I am trying to learn more and at my age.
   - Yes, because the tasks of (?) make you improve about the job and about the math of the job.
   - No (2)

Other comments

Some of these questions need to be thought about. I really haven't had the time and I apologize for the delay.

APPENDIX B

Results from Interviews of the Supervisors of Workers that Participated in the Technical Mathematical Skills Class

1. *What kind of changes have you seen in your employees who completed the Technical Mathematical Skills course this summer?*

Want to take more classes
- They are anxious to take more classes which are helpful.
- Looking forward to attending other courses to improve himself for a better job in the future.

Personal growth
- More self-reliant, confident.

Job-related - trades
- He can read a ruler better and can do some jobs without asking so many questions.
- Measures more efficiently now.

Job-related - measuring chemicals
- Understands the concept of mixing chemicals.
- She has problems with multiplication and this class has improved her math a little and she practices more.

No changes noticed yet
- No basis for evaluation at this time. Supervising H-Quad for a short period of time.
- Haven't done anything mathematical at this time to evaluate this.
- No comments. No feedback from employee. (4)

2. *Are they able to apply what they learned to the job? Please give an example.*

Measuring chemicals
- When mixing and measuring chemicals (6)
- Yes, the chemicals are measured the way they should be
- Yes, by being able to mix chemicals properly and possibly measure a room

Measuring - Trades
- Yes, figuring out square footage.
- Yes, transfers fractions into decimals. Can compute cubic areas; was not able to do this before.
- Yes, can read ruler better and has more confidence
- Yes, in knowing how much paint is needed to paint a room.

Other
- Improved doing time sheets.
- Did not attend course to know what was taught.
- No response (2)

3. *Did it improve the employee's capability to do their job?*

   - Using now the proper amounts of chemicals to achieve the quality of work required.
   - Yes, don't have any hesitation to ask him for math solutions, cubic problems, fractions. Would not have asked before.
   - Yes (7)
   - No response (4)

4. *What impact has the math class had on your department/work team?*

   Helped the department/team work

   - Very invigorating
   - Used less chemicals because they are being measured correctly
   - Worker gained self-confidence, new skills. Makes him a more productive worker, which improved entire department.
   - Able to help others measure not
   - The person is pleased with herself because she accomplished something beneficial, not only to herself but to her job.
   - He can work independently more often.

   Want more classes

   - Employees are looking for more classes
   - The employees are looking for further classes
   - Generated interest in future classes

   No help to department or no response (5)

5. *What, if anything, wasn't achieved that you hoped would be?*

   [Bad question, unclear. Question thrown out.]

6. *What were any unexpected outcomes?*

   Interest in future classes

   - Those that attended the math class have more people interested [in taking classes].
   - This student is interested in taking future classes.
   - More people are interested in classes
   - This person wants to take more classes and tells everyone she meets how great the basic math class was and the good instructor we had.

   People came together to help one another

   - a closer relationship with one another on the job.
   - Worked as a team to help one another solve a problem from the class.

   Other

   - He learned more than I thought he would.
   - No response (6)

7. *Do you have any suggestions about future courses?*

Specific class suggestions

Math (5) (advanced math and also basic math again)
Reading comprehension (4)
ESL (3)
Communications (2)
- Teach class in not only English but Spanish
- More trade oriented

More classes (2)

No response (3)

REACH

APPENDIX 3

Technical Communications Course

Evaluation Report

Evaluation conducted by

Project REACH—Stony Brook Advisory Committee
Division of Residence Operations
State University of New York at Stony Brook

Report prepared by

Muriel P. Medina

Workplace Education Consultant for the
Governor's Office of Employee Relations
and
Civil Service Employees Association, Inc.

February 18, 1994

Contents

Page

I. Introduction 1

II. Evaluation Process 1

III. Findings 2

IV. Analysis Comments 4

V. Recommendations 6

VI. Director's Comments 8

Appendix A: Participant Survey Responses

Appendix B: Supervisor Survey Responses

Appendix C: Responses from Those Who Chose Not to Complete the Course

Appendix D: Responses of Those Who Indicated an Interest in the Course but Did Not Register

I. Introduction

The Technical Communications Course is the second job-related basic skills course offered by Project REACH—Stony Brook for Custodial and Maintenance workers in the Residence Operations Department. This 40-hour course was held October 19 through December 23, 1993. Classes were held on Tuesdays and Thursdays from 11:30 a.m. to 1:30 p.m.

II. Evaluation Process

The Project REACH—Stony Brook Advisory Committee conducted an evaluation of the Technical Communications Course and used a process similar to its evaluation of the first Project REACH course, Technical Mathematical Skills Course. The Advisory Committee's team-based evaluation was designed to augment the information from the questionnaire given to participants at the end of the course by the instructor.

The Committee collected information from four groups of people:

1. participants in the course
2. supervisors of participants in the course
3. workers who began the course but chose not to continue
4. employees who originally indicated an interest in the course but did not register for it

Committee members gathered information in two ways:

1. surveys of course participants, their supervisors, and employees who had indicated an interest in the course but did not register
2. interviews with workers who began the course but chose not to continue

The three surveys were sent out from the Division Director's office, and responses from the surveys were compiled by the Director's secretary. Two Committee members, assisted by the Assistant Director, conducted interviews of workers who began the course but chose not to continue.

On December 28, 1993, Division Director prepared a summary report of the responses from the employees who originally indicated an interest in the course but did not register for it (see Appendix A). On January 27, 1994 the Advisory Committee met to analyze the findings from the surveys and interviews and to develop recommendations for future courses offered through Project REACH—Stony Brook.

III. Findings

Following is a summary of the information gathered through the surveys and interviews. (For a complete listing of the responses, see Appendices A-E.)

Summary of Course Participant Responses

1. Personal goals for taking the Technical Communications Course
- to improve writing, reading, and communication skills
- to learn more about their job
- to get a better position in the future

2. The most important things learned in the course
- communicating better with co-workers, supervisors, and students
- openness and participation in the class
- becoming a better reader
- becoming better at writing memos and other correspondence
- dealing with stress
- listening before speaking
- understanding the problems and feelings of employees from other departments
- the importance of body language in communication

3. What participants achieved that they hadn't expected to
- learning to give clear explanations and get to the point of what they want to say
- interviewing co-workers
- learning to listen until a person is finished talking and then answering
- better understanding of co-workers

4. Helpful things the teacher did
- made participants comfortable, treating them as equals and as adults, not children
- knew her subject and gave clear, patient explanations
- gave individual attention, "keeping on top of you," and showing concern that everybody learn what was being taught
- explained and demonstrated new ideas

5. How participants changed as a result of being in the course
- understand more about one's job
- more confident about reading and writing on the job and communicating with co-workers and students
- have more confidence and interest in learning and self-betterment
- actually practice being more concise in conversations-understand more about one's job

Summary of Supervisors' Responses

1. Changes in employees and their ability to do the job
- course participants can communicate better with co-workers and students
- improvement in writing skills
- more outgoing, confident, assertive
- happier, change in morale
- too soon to see any changes
- can read labels and instructions better
- better understanding of using cleaning products

2. Impact on department/work team
- communication improved
- overall feeling of self-respect and morale has gone up
- too early to tell
- lost too many man-hours at one time
- co-workers have seen improvement since employee took course

Summary of Responses from Those Who Decided Not to Complete Course

1. Personal goals for taking the Technical Communications Course
- to improve reading, writing, and English skills

2. Reasons for not completing the course
- difficulty understanding English
- difficulties with finding parking
- conflict with work schedule

Suggestions for Improving Participation in Future Courses

- Offer incentive awards

- Provide better information about the course given beforehand

- Give courses for people who are not fluent in English

- Make the course location more accessible, (parking was a problem)

- Offer same courses more than once

- Continue getting instructors that have patience and take the time to thoroughly explain things

- Let people know that they will not be graded, that everyone is there to learn, and that learning can be fun

- Include more writing, spelling, reading, and role-playing

- Limit the number of participants from one work area

- Adjust class schedule to take restroom cleaning into account

- other courses to offer
    - a course on teamwork
    - advanced courses in math and reading
    - a basic reading course
    - a GED course

IV. Analysis Comments

As the Advisory Committee members read and thought about the results of the surveys and interviews, they made the following observations:

Based on Participants' Comments

- Maybe we should ask for personal goals at the beginning of the class and, at the end of the course, compare them with what they learned

- People wanted to be more effective on the job and improve themselves

- A lot of important learning was not cited as goals, and was more specific

- Participants appeared to become comfortable and confident with themselves and increasingly more eager to learn new things

- Everyone seemed to achieve what they set out to do, and were excited about relating it to their jobs

- Perhaps we should have a longer class, say 60 hours instead of 40 hours; although for many the class length was just right

- There seemed to be a strong impact on worker relationships. People used words such as "understanding," "get along with," "get to know better" when talking about the impact of the course

Based on Supervisors' Comments

- Many changes seem to be attitudinal in nature; morale has improved. Staff more confident in themselves, which results in efficiency and pride in their jobs
- Supervisors have gained more confidence in staff. Better mutual understanding
- Communication is more widespread and not limited to supervisor-to-workers
- Reading and communicating are the main behavioral applications of what people learned in class; morale and attitudes equally in evidence
- People have more confidence as a result of participating in the course

Based on the Comments of Those Who Did Not Complete the Course

- The course was not what they expected; we need to think about the flyer for the next course
- Staff has been given every opportunity to complete the course and must be flexible and grateful that these courses have been offered
- Perhaps we should have some type of exit interview when a person drops out of the course
- Both those who completed the course and those who did not had the goal of improving their reading and writing skills

Suggestions

- We definitely see the need for ESL
- People want more reading courses
- If possible, incorporate teamwork topics in future reading, writing activity in class

Comments about the Evaluation Process

- It's tough to bring in those with *limited* skills—How to do this?
- We need to respect what people tell us on the surveys, even if we don't agree with them

V. Recommendations

Based on the results of the evaluation, the Advisory Committee developed the following recommendations:

Evaluation Results

1. Make the Evaluation Report available to all employees
2. Members of the Advisory Committee should make sure the Report is circulated to all co-workers
3. Prepare a short, easy-to-read summary of the Evaluation Report
4. Make sure that key supervisors understand the importance of sharing the evaluation results with their staff
5. Have supervisors hold staff meetings and read the Evaluation Report summary so everyone hears it

Recruitment for Future Classes, including the ESL Class

1. Use a picture or sketch on the course flyer to get people's attention and give an idea of what the course will be about
2. Use the video that was made in the Technical Communications Course as a recruitment tool
3. Have the people who were involved in making the video also be involved in showing the video to Residence Operations staff

Course Levels

When possible, offer more than one for each course, for example:

Level 1 - Introductory content
Level 2 - Basic content
Level 3 - Advanced content

PARTICIPANT'S CRITIQUE

1. What were your personal goals for the Technical Communications Course?

*To be more effective through communications; to improve writing skills; learn how to make a point through short communication.
*To learn better about my job; to read better.
*The description of the course was misleading. I thought it was to better your reading and communication ability and it wasn't. Speeding my reading skills.
*To improve on my writing correspondence.
*My personal goal was to learn more about the work rules and communications.
*To write better memos. Trying to use the right pronunciation when I speak.
*To brush up on my communication skills; to better learn to communicate effectively; to be able to communicate with as few words as possible.
*To learn more about the job and communication with the students.
*To learn where to go and how to do things by going to the proper mail as to the right person.
*I wish a better psoition in the future.
*Improving spelling and reading.
*To write, speak and become active as far as explaining and actually showing someone what needs to be done.
*To get better with my job.

2. What are the two most important things that you learned in the class? Why are these things important to you?

*Classmates become more open to each other. Role playing/video was made. It opens the opportunity for everyone to increase their potential.
*To become a better reader and helped me find different word meanings.
*How to write memos to communicate with other departments.
*How to deal with stress. Also how to write and comprehend better. I feel better about myself with written correpsondence.
*I learned how to report accident and now what to do if one of my co-workers has an accident. I learned Stony Brook's regulations.
*I leaned about communications and work rules.
*To listen before I speak. I have a better understanding of how to write memos now.
*One should communicate with others on the job in simple terms. This is important to me because I sometimes have a lot of information to relay and if I relay it simply it is remembered. Body language is communication. I'll try not to show disappointment through body language when dealing with clients.

*I learned more about the finer details of the job.
*Communication through the tone of your voice and how to communicate without offending others.
*Better communication with the Supervisor and the partners. Good relationship in my partners and friends.
*Understanding the problems and feelings of employees from other Departments in relation to their jobs; it makes good compromise.
*To openly participate and to ask questions when I don't clearly understand. It is important to me so that I am understood.
*I am learning to read and for my family and Stony Brook.

3. Was there anything that you were hoping to achieve that you didn't?

*I feel I achieved more than I expected.
*I wish the class was longer.
*Speed my reading,
*No, because everything was done according with the program.
*No.
*Yes. How to express myself to others by using body signs and tones of your voice.
*My hope is to learn to write better English.
*More practice with the actual usage of English. Our class time never seemed to be long enough.
*More words and sentences.

4. What did you achieve that you weren't expecting to?

*Interviewing my co-workers, which was an exciting learning experience.
*My reading of different word meanings.
*I was able to work with some of the slow speaking students.
*Instructor took the time to answer any questions about writing and showed me how to get directly to the point without prolonging it.
*How different the co-workers are when you get to know them.
*Some sentence consruction.
*Learned to listen till a person is done talking and then answer.
*Achieved the ability to get my point across in fewer words than I previously had to use.
*I really enjoyed the class and also got a lot out of it.
*How to get along with everybody.
*Progress in my work.
*Better understanding of others.
*To give clearer explanations and to be more to the point.
*The teacher gave me more ideas.

5. What things did the teacher do in class that helped you to learn the most?

*Ongoing interaction, keeping on top of you and showing lots of concern.
*Help me sound out words and break them up.
*Explained memo patterns.
*She was understanding and helped when we were stuck on anything. She taught us not as children but as adults. She made it interesting enough that I listened intently so as not to miss anything.
*Her big knowledge.
*Being patient with the students. Made us all feel equal. Explained everything till we all understood. Made all participate in the program.
*Teacher demonstrated ideas that she wanted class to remember and repetition.
*Using the blackboard and correcting me on how to use correct and proper phrase.
*Communication with others.
*Made me feel comfortable and not to be embarrassed.
*Gave individual attention and took time to explain to everyone.

6. Did you learn how to apply the communication skills to your job?

*Yes, I try to use them daily in the work place.
*Yes, to give clear instructions and explanations to my co-workers.
*I improved more.

7. How have you changed as a result of being in the course?

*Constantly wanting to learn more and having the opportunity of making it a daily challenge.
*I learned to understand more about my job, feel more confident about reading labels and my writing has improved.
*No, because my trade is completely technical.
*I am more prepared to deal with the students and co-workers.
*Being 64 I don't know if I can change but I sure will try my hardest to use the knowledge I have learned in this program.
*I'm more aware of the importance of saying things in a short effective way and I actually practice being concise in my conversations.
*I can do my job better now.
*I changed my attitude toward co-workers and others around me.
*Taking more time in writing.
*I think I have more interest in betterment and confidence.
*It made me more aware of just how important clear communications are.
*To get along with people.

8. What suggestions do you have for improving participation in the course?

*Early planning
*Incentive awards
*Same class given more than once.
*Classroom at a smaller scale.
*Class should be a non-English speaking class; a slow reading class; a well reading/speaking class not all mixed together.
*Felt misled by the flier, maybe in the future the notices should be worded differently.
*To offer the same course to new participants, or to everybody that wants to take it.
*To come up with something that the majority can like: E.S.L. in different levels.
*Keep getting teachers that have patience and to take time to explain the situation at hand in reading, vocabulary and writing.
*Having a special group for the people who can't speak English fluently. In that group have someone who can understand Spanish, and can speak English well enough to help people who have poor English skills.
*Give more courses.
*Have the course meet in an area more accessible for participants to park.
*More writing, spelling and reading in class.
*I think there should be some more role playing.
*Participants should know that you are not graded; that each one is there to learn; that learning can be fun. You are treated as an adult.
*To learn more and improve to help Stony Brook. I like Stony Brook very much. We shall overcome some day.

SUPERVISORS' CRITIQUE

1. What changes have you seen in your employees who completed the Technical Communications Course?

   *Change in morale.
   *At this time, I have not seen any changes. It may be too soon to tell.
   *Employees enjoyed course but felt there should be more. There was no improvement.
   *Better oral and written skills.
   *More assertive in working with co-workers.
   *Improvement in reading, better vocabularly skills. Employees more eager to apply to job.
   *Since taking this course participant wants to further reading and writing, etc.
   *More authoritative and asserts self better.
   *Yes, but needs more classes on reading comprehension.

2. Are they able to apply what they learned to the job? Did the course improve their capability to do the job. Please give an example.

   *Yes, can better communicate with others.
   *Learned to read the labels better. Better conversation with co-workers.
   *Too soon to answer this question.
   *Needed no improvement; employee know how to do paper work.
   *More outgoing.
   *Yes, reads labels more carefully.
   *Employees have better understanding of using everyday cleaning products in a more sufficient manner.
   *Better communications with others. More careful with reading instructions.
   *Yes; much happier; improved to become a Janitor.
   *Yes, most of the time; Supervisor can call on employee for assistance more.
   *More assertive
   *Yes; this course gave employee more confidence. Employee is able to communicate better with students.

3. What impact has the Technical Communications Course had on your department/work team?

   *Too early to tell.
   *Communicates better.
   *None as of yet.
   *Lost too many man hours at one time.
   *Wants to go further in education.
   *Employees have better understanding and are willing to take charge when ordering supplies, measuring chemicals, and overall feeling of self-respect and morale has also gone up.
   *Communications are improved.

*Co-workers have seen an improvement since employee took this course.

4. Do you have any suggestions about future courses?

*None
*Limit participants from one area.
*Run a course on working as a team. Have advance courses in math and reading.
*Upgrade math classes.
*An indepth reading comprehension class.
*A course on working on the values of teamwork.
*More reading and comprehension; possibly an easier course for employees with a problem reading. (Supervisor appreciates the instructor taking an extra one-half hour to help this employee. It has made an impact on his life.)

CRITIQUE OF THOSE WHO DECIDED NOT TO COMPLETE COURSE

1. What were your personal goals for the Technical Communications Course?

   *I thought the class was going to be in improving my reading and writing.
   *My goals were to improve my reading and writing skills.
   *To improve my English.

2. Why did you decide to not complete the Technical Communications Course?

   *I was having trouble understanding English and the teacher went too fast for lme.
   *Difficulties in parking, confli9cted with daily work routines. All restroom cleaning is done on Tuesdays and Thursdays. Would be better if shift was changed to 6:00 AM - 2:30 PM or 7:00 AM - 3:30 PM.
   *Course didn't cover what I though it would. I later heard that the course improved, Maybe I should have continued.
   *Wasn't the class that I was expecting.
   *Car troubles. Class was hard to keep up with in understanding.

3. What suggestions do you have for improving participation in the next Project REACH course?

   *Change the days of class, schedule for cleaning restrooms gets in the way.
   *More basic reading, writing courses.
   *Prep course for GED so I can obtain a high school diploma.
   *To bring us more facility.
   *Instructor needs to slow down in her teaching, went too fast for me.

4. **QUESTIONS FOR THOSE WHOSE NATIVE LANGUAGE IS NOT ENGLISH:** Project REACH is planning to offer a job-related ESL course for Custodial and Maintenance workers. Are you interested in taking this course: indicate yes, no or possibly. What should this course cover?

   *Yes, reading and writing.
   *Possibly, reading, writing and grammar.

Responses of Those Who Indicated an Interest in the Course but Did Not Register

Summarized by

Director of Residential Operations

Prior to the selection of the Technical Communications Course, we sent a letter to each of our employees as to what course(s) they might be interested in, as a follow-up to our Technical Math Skills Course. They were offered a choice of four possibilities: Basic Math, a continuation of the Technical Mathematics Skills course, English as a Second Language, or Technical Communications. The responses indicated:

7 - Basic Math
7 - Intermediate Math
10 - ESL
25 - Technical Communications

The Advisory Committee selected the Technical Communications Course as our next offering. Prior to the start of the class, a letter was sent to each employee that indicated an interest in the class, letting them know that the course would be offered, when, and where. A flyer was also distributed to pique the interest of our other employees.

Our initial registration included 26 students, of which 16 were from the list that originally indicated an interest in the course. I sent a letter to each of the nine employees that originally indicated an interest in the course but failed to register, to get feedback on what changed their minds or what we should/could have done differently which would have allowed them to register for the program.

The results were mixed:

- Four people stated that they did not know the dates for the class (This was surprising because all employees received a personal letter and there were flyers on the program in each work area).

- Two people thought the offering would be too basic.

- One person was going to retire within a few months and didn't want to take a seat from someone who would be around for a longer period of time.

- One person had to clean bathrooms on Tuesdays.

- One person had a parttime job on Tuesdays.

Evaluation of Technical Communications Course

Responses from Participants in the Course

Personal goals for taking the course

- to improve writing, reading, and communication skills
- to learn more about their job
- to get a better position in the future

The most important things participants learned

- communicating better with co-workers, supervisors, and students
- openness and participation in the class
- becoming a better reader
- becoming better at writing memos and other correspondence
- dealing with stress
- listening before speaking
- understanding the problems and feelings of employees from other departments
- the importance of body language in communication

What participants achieved that they hadn't expected to

- learning to give clear explanations and get to the point of what they want to say
- interviewing co-workers
- learning to listen until a person is finished talking and then answering
- better understanding of co-workers

Helpful things the teacher did

- made participants comfortable, treating them as equals and as adults, not children
- knew her subject and gave clear, patient explanations
- gave individual attention, "keeping on top of you," and showing concern that everybody learn what was being taught
- explained and demonstrated new ideas

How people changed as a result of being in the course

- understand more about one's job
- more confident about reading and writing on the job and communicating with co-workers and students
- have more confidence and interest in learning and self-betterment
- actually practice being more concise in conversations

February 18, 1994

Supervisors' Responses

Changes in employees and their ability to do the job

- course participants can communicate better with co-workers and students
- improvement in writing skills
- more out-going, confident, assertive
- happier, change in morale
- too soon to see any changes
- can read labels and instructions better
- better understanding of using cleaning products

Impact on department/work team

- communication improved
- overall feeling of self-respect and morale has gone up
- too early to tell
- lost too many man-hours at one time
- co-workers have seen improvement since employee took course

Responses from Those Who Decided Not to Complete Course

Personal goals for taking the Technical Communications Course

- to improve reading, writing, and English skills

Reasons for not completing the course

- difficulty understanding English
- difficulties with finding parking
- conflict with work schedule

February 18, 1994

Suggestions for Improving Participation in Future Courses

- Offer incentive awards
- Provide better information about the course given beforehand
- Give courses for people who are not fluent in English
- Make the course location more accessible, (parking was a problem)
- Offer same courses more than once
- Continue getting instructors that have patience and take the time to thoroughly explain things
- Let people know that they will not be graded, that everyone is there to learn, and that learning can be fun
- Include more writing, spelling, reading, and role-playing
- Limit the number of participants from one work area
- Adjust class schedule to take restroom cleaning into account
- other courses to offer
    - a course on teamwork
    - advanced courses in math and reading
    - a basic reading course
    - a GED course

TEAM EVALUATION AT VICTORIA GENERAL HOSPITAL: A CASE STUDY FROM A WORKPLACE EDUCATION PROGRAM

Prepared
by
Paul Jurmo

One of seven case studies in
"Team Evaluation:
Case Studies from Seven Workplace Education Programs,"
a report prepared in June 1994
by Laura Sperazi and Paul Jurmo

VICTORIA GENERAL HOSPITAL

Halifax, Nova Scotia

I. PROGRAM BACKGROUND

In late 1992, Victoria General Hospital (VGH) -- with partial funding and technical assistance from the Nova Scotia Department of Education (NSDE) -- had run an employee basic skills program for two years, having expanded from six employees from one department to twenty from eight departments.

The program takes a "learner-centered" approach, focusing on personal learning goals negotiated by the participant with the instructor. These personal goals vary from learner to learner, and break down into:

Academic goals (e.g., "earning my GED," "improving my writing");
Self-confidence (eg., "feeling more relaxed");
Job-related goals (e.g., filling out forms, qualifying for other jobs);
Non-job-related goals (e.g., helping their children, further education).

These learner goals were summarized as follows:

> "To enable participants to develop self-esteem, reading, writing, oral English, and math skills needed to solve problems they identify as of personal interest to themselves."

II. BACKGROUND ON THE TEAM

History of the team

From its inception in fall of 1990, the program had been overseen by a project team composed of representatives from hospital management, one of the hospital's unions, and the NSDE. In 1991-92, two program participants joined the team, as well.

In early 1993, the team approached ABC CANADA, a national foundation based in Toronto whose services include providing technical assistance to workplace education programs. VGH asked ABC for guidance on setting up a program evaluation, to document the program's positive impact and thereby help ensure ongoing support from the hospital administration.

By coincidence, ABC's workplace consultant, Sue Folinsbee, had already begun preparation of a collaborative evaluation methodology which ABC hoped to field-test in one or more sites. This evaluation project was being developed with Paul Jurmo, who had already begun a similar project in the United States with Laura Sperazi, under National Institute for Literacy funding.

In response to VGH's stated interest in evaluation, Sue Folinsbee and Paul Jurmo agreed to "use" VGH as a test site for the collaborative evaluation methodology they were developing for Canada and the U.S. In turn, it was hoped that VGH would not only produce a meaningful evaluation but -- for the longer-term -- set in place an ongoing evaluation system.

Stakeholders represented on the team

In a meeting on March 29, 1993, the project team was -- for the purposes of this project -- organized with the following nine representatives of program stakeholder groups:

Hospital management representatives:
- Two from the Training and Development Department:
    - An evaluation specialist.
    - The education program coordinator for 1992-93.
- Three from the eight departments sending workers to the program:
    - One from Food and Nutritition Services
    - Two from Modern Cleaners (a contractor to Housekeeping)

Union representative:
- One from the Canadian Brotherhood of Railway, Transport, and General Workers, one of the hospital employee unions.

Program participant representative:
- One, an employee in Food and Nutrition Services.

Education provider representatives:

- Two from the Literacy Division of the NSDE. (Both had, in earlier years of the program, served as instructors.)

III. THE PROCESS WHICH THE TEAM WENT THROUGH

Phase I: Facilitators prepare themselves and organize the team.

Initial preparations

In this case, the "facilitators" were Sue Folinsbee and Paul Jurmo, workplace education specialists who -- as noted above -- had agreed to provide technical assistance to VGH. They prepared themselves by:

- Interviewing the VGH program coordinator by telephone: They clarified program status, team make-up, and why VGH now wanted to do an evaluation.
- Asking project team members to complete a questionnaire: Members specified what help they needed, what they had already done vis-a-vis evaluation, who was involved, and what kind of information they might want to gather in a future evaluation. This helped the facilitators understand the team's evaluation-related experience and concerns, while getting team members in the mode of thinking about evaluation.

Organizing the evaluation team

Until early 1993, the team's role had been largely an advisory one, responding to requests from education staff. It had not to that point engaged in any kind of formal evaluation activities.

To help the team to begin thinking about what they might want out of an evaluation, the coordinator talked with members in two team meetings about what evaluation meant, why do it, and the steps and responsiblities involved. These discussions ensured a basic understanding and buy-in on the part of team members. Team members then filled out the above-described questionnaire sent them by the facilitators. By carrying out these discussions and completing the questionnaire, members were thus oriented to their new roles as evaluators.

The facilitators prepared a plan for their first meeting with the team, based on the results of the questionnaires. The education coordinator reviewed this plan and explained the meeting's agenda to the team prior to the meeting.

Phase II: Planning the evaluation.

Clarifying program goals.

It was originally thought that, in a single meeting on March 29th, the facilitators could help the team analyze its education program and prepare an action plan for additional evaluation activities. Time did not permit all of those objectives to be met in one session. Instead, the team:

- Clarified who the program's stakeholders were. Stakeholders included not only the groups represented on the team but higher-level management and learners' families and communities, too.

- Clarified program goals (i.e., stakeholders' expectations). The team summarized a mix of academic, self-confidence-related, job-related, and non-job-related objectives. They synthesized those goals into the following goal statement:

  > "To enable participants to develop self-esteem, reading, writing, oral English, and math skills needed to solve problems they identify as of personal interest to themselves."

- Clarified to what extent those goals have now been met. Referring to what they said in the earlier questionnaire, the team developed a list of positive outcomes already achieved by the program. These included examples of many of the hoped-for academic, self-confidence, job-related, and non-job-related outcomes, as well as the following unanticipated outcomes:

  -- increased supervisor interest in worker education,
  -- a new kind of "benefit" for workers,
  -- improved management-employee relations,
  -- improved understanding across departments,

- -- learner-written materials now used in other adult education programs,
- -- expanded tutor skills and relations with learners, and
- -- strengthened educators' expertise and professional relations.

- Clarified what evaluation activities they had used so far. The team identified the following as activities they had used for evaluation purposes: feedback from participants, learner self-assessment, GED exam, team discussions, formal written reports, review of attendance figures, and observation of learners in various program activities.

- Identified lessons learned from those evaluation activities. The team identified lessons which the above evaluation activities had taught them about (a) the program's overall strengths and needed improvements and (b) steps needed to improve the evaluation system used to date. The latter evaluation-related improvements included:

  - -- Document why the program should be continued/re-funded.
  - -- Get more input from learners.
  - -- Clarify why people drop out.
  - -- Focus on outcomes for the institution (e.g., increased participation by workers in "quality" activities).
  - -- Clarify how the program has changed over time (e.g., why enrollment is lower this year).
  - -- Find out if "graduates" might want to be involved or help aferward.
  - -- Ask learners for feedback on course content and what they might want to do next.
  - -- Involve managers and supervisors more actively in defining what information they need from the program.
  - -- See our evaluations as a way of adding to the body of knowledge for the workplace education field (e.g., NSDE).

Identifying who wants to know what information for what purpose.

In the second half of the March 29th meeting, team members began mapping out a strategy for future evaluation activities. They did so by responding to the question of "who wants to know what information for what purpose?"

In the first case, the "who's" for the evaluation (i.e., the audiences who want information) were divided into "primary audiences" (i.e., the President's Executive Council, prospective students, program staff, NSDE, VGH department heads, union representatives, and current participants) and "secondary" audiences (i.e., the print shop, audio-visual services, and training and development department which support the program; and tutors).

To answer the second part of the question (i.e., "what information" is needed), the team reviewed the responses they had given to the pre-workshop questionnaire and agreed that the following list represents the questions they wanted to answer in this evaluation:

"What Information" Do We Want Now?

Establishing the need:

- Is there a need for employee upgrading?

Clarifying what was accomplished:

- What do stakeholders see as benefits of the program?
- Are participants moving toward meeting their goals?
- Does management see changes in participants' attitude, flexibility, or confidence which could lead to improvement in job performance?
- What was useful?
- How valuable is the program?
- Is there any way of showing how increased employee education can in any way be related to improved quality care?
- Does the union see any benefit or improvement from their perspective?

Deciding whether to continue:

- Do we continue the program?
- Should it be an ongoing program?
- How can we justify continued funding?

Deciding how to strengthen the program in the future:

- Are we doing the right things to address the problems/opportunities/the best approach to delivery?

- If the program is meeting student expectations, how can it be improved?
- How improve the overall planning and implementation process, to increase participation and ensure more effective planning of future programs?
- What do we repeat?
- What do we leave out next time?
- How does the project team feel about the quality of its own work as a team?

The team members then answered part 3 of the question (i.e., "for what purpose" will this information be used?):

"What Purposes"
Will the Above Information Be Used For?

- To ensure program improvement/efficiency: to help us optimize the "fit" between our goals and actual outcomes
- To ensure ongoing support for the program: to ensure financial resources from funders, as well as buy-in, cooperation, and investment from stakeholders.
- To model a "continuous improvement" approach to management: By critically analyzing our education program, stakeholders will get practice in team planning skills they can use back in the larger organization.

Designing a strategy for gathering data

At the March 29th meeting, time ran out before the team could proceed much further with designing the evaluation strategy. Subsequently it was agreed that the facilitators would return for a second meeting, to help the team pull together specific tools and a longer-term evaluation strategy.

Between the two meetings, the facilitators prepared minutes of the March 29th meeting and circulated them to the team members to reinforce what was learned in that meeting.

The facilitators then prepared a plan for the second meeting, along with an action plan outlining ideas for a longer-term evaluation project.

On April 19th, the team met with the facilitators a second time. Rather than look backward (as was the focus in the first meeting), in this second meeting the team was much more "action"-oriented, focusing more clearly on specifics of planning an evaluation. To get this planning going, the facilitators presented their action plan, which proposed the following four phases of evaluation activities, to be carried out through December of that year:

Phase I: Looking back at what has been achieved to date (April-June 1993)

Step 1: Develop drafts of data-gathering instruments at 4/19/93 meeting
Step 2: Prepare to use instruments for first phase of data-gathering
Step 3: Use the instruments to gather the data
Step 4: Organize the resulting data
Step 5: Analyze the data
Step 6: Prepare a final report
Step 7: Present the final report
Step 8: Take follow-up action

Phase II: Preparing for more-comprehensive data-gathering in the fall (June-August 1993)

Phase III: Collecting data in fall 1993 (September-November 1993)

Phase IV: Analyzing the data collected in the fall (November-December 1993)

The team agreed to adopt this plan, noting that details of Phases II, III, and IV would be planned when results from Phase I were in.

Designing data-gathering instruments

To design the data-gathering instruments to be used in Phase I, the team first considered three questions:

1. What are possible sources of the information we want to gather?

2. What activities might we use to gather information from those sources?
3. What are the advantages and disadvantages of each of those data-gathering activities?

In a large group, team members responded to the first two of those questions. As possible sources of information they identified current program participants, potential participants, management representatives from eight participating departments/floors, participants' co-workers, instructors and tutors, program "dropouts," and documents. As possible ways of gathering information from those sources, they cited interviews, questionnaires, focus groups, review of documents, observation, anecdotal evidence, simulations, and learner portfolios (containing participant journals, checklists, sample writings, and other evidence of learner progress).

Breaking into two groups, team members analyzed the pro's and con's of each of the above data-gathering activities. They said that, optimally, instruments should provide efficient collection of information from those who know the program, reinforce communication links among stakeholders, and respect confidentiality. Data-gathering activities should not intimidate respondents, intrude on busy schedules of both information source and information gatherer, breach confidentiality, allow bias to influence how data are gathered or analyzed, or overlook the full realities of the program and informants' thinking,

The team now better understood the data-gathering options open to them, and then proceeded to select which instruments they would use and to prepare working drafts of those instruments. They agreed that, whichever activities the team selected, the instruments should be relatively easy to learn and use in the time available and should focus on the information needed by the identified audiences.

To be sure they would gather the information needed most immediately, the team agreed that they would collect information to answer the following questions:

Information Needed for Phase I

Outcome-related information
- What has been accomplished to date?

- Should the program be continued/re-funded and, if so, at what level?

Program-improvement- related information

- What have been the goals of the program so far (for both individuals and for the organization) and what might they be in the future?
- What actions need to be taken (and by whom and when) to improve the program?

The team agreed that, in the first phase of the pilot project, the following data-gathering activities might be used. (Given the limited time the team had to give to this data-gathering, these activities were listed in order of priority.)

Data-Gathering Activities for Phase I

1. Focus groups and interviews for current and past participants.
2. Focus groups for supervisors (from eight departments) having contact with participants.
3. Focus groups and interviews for those who chose not to participate before or during program.
4. Interviews with potential participants.
5. Interviews and focus groups with education staff.

To help those team members who had never designed a data-gathering instrument before, the facilitators displayed a sample instrument, a guide for a focus group to be conducted with supervisors. The facilitators noted that the questions asked in that focus group would be essentially the same questions asked of other sources participating in focus groups or individual interviews. The facilitators explained that this consistency of questions is important because it allows the team to compare what various sources say about the same questions.

The sample guide for a focus group for supervisors was as follows:

Sample Focus Group for Supervisors

1. Individually, supervisors rate how well the program has achieved its overall goal on a scale of 1 to 10. (1= "not very well," 10 = "extremely well")

2. In small groups, supervisors come to agreement on #1 with reasons for their rating.

3. Small groups then answer the following "outcome-related" questions.

   a. What kinds of changes have you seen in your employees?
   b. What impact has the program had on your department?
   c. What, if anything, wasn't achieved that you hoped would be?
   d. What were any unexpected outcomes?

4. A spokesperson from each group presents to the large group a summary of the small group discussion on #2 and #3 above. This discussion is recorded on flipchart paper by a facilitator.

5. The process for #3 and #4 is repeated with "program improvement" questions. (See below.)

   a. What are the strengths of the program?
   b. How could the program be improved regarding:
      - Content and topics
      - Teaching style
      - Time (scheduling) of program
      - Release time
      - Location/facilities for program
      - Support services (extra counselling . . .)
   c. How could the program better recruit new students, advertise the program, and retain current learners?
   d. Should the program be continued/re-funded?
   e. Should the program be expanded? If so, in what way(s)?

The team reviewed this sample guide for a focus group for supervisors, suggesting revisions in wording and asking for clarification. It was agreed that these basic questions would, as much as possible, be adapted for other data-gathering activities to be carried out by the team.

In two groups, members prepared drafts of guides for the other focus groups and individual interviews the team had earlier agreed to carry out. They reconvened and displayed the draft wording of their instruments on flipchart paper. The team agreed on working versions to be used when they next actually went out and gathered data.

The facilitators took some time at this point to raise the following issues for the team members to keep in mind as their evaluation work proceeded:

Issues Needing Further Attention

1. When do we use sampling? And how do we do it?
2. How do we develop necessary interviewing skills?
3. What do we do with supervisors who don't know which of their employees are in our program? How do we maintain learner confidentiality in such a case? Do we ask learners first?
4. What options are there for those who can't attend a focus group? Do we leave them out? Do we try to arrange a second focus group and/or individual interviews for them?
5. How do we identify "informal leaders" among potential participants to be interviewed?
6. When interviewing education staff and tutors, be sure to ask them to identify personal outcomes they have achieved by working with the program.
7. Avoid using individual names, to protect learner confidentiality.

After discussing those issues, the team agreed who would be in charge of using which instrument, when data would be gathered in the next 1-2 months, and to whom the resulting data would be given.

Phase III: Gathering, organizing, analyzing, and reporting the information

Gathering and organizing the data

During the period of May through July 1993, team members used interviews, focus groups, and questionaires to collect information from 43 informants, including 19 program participants, four "early terminations," three instructors and two volunteer tutors, seven supervisors, and eight members of the planning team itself.

As members realized the difficulty of organizing so many data-gathering activities with limited time and personnel, they pared down the data-gathering schedule accordingly.

Those using the instruments summarized the responses and relayed them to the project coordinator. She recorded the responses in writing and on her computer, and then organized them by cutting and pasting them into meaningful categories.

She took pains to be both concise and detailed enough to reflect what the informants actually said. She also tried to avoid inserting any "editorial comments" of her own. If such comments came to mind as she recorded the informants' responses, she noted them in a separate space titled "coordinators' interpretations." (See "Analyzing the data," below.)

With long-distance guidance from the facilitators via telephone, the coordinator laid out an outline into which she could insert the data. The key categories of the outline were the four major questions which the team had set out to answer. Under each of those questions, she had sub-categories organized by data source. The resulting outline looked like this:

Outline for organizing the collected information

1. What have been the goals of the program?
    a. What learners said
    b. What "discontinued" learners said
    c. What education staff (both paid and volunteer) said
    d. What management/supervisors said
    e. What the project team said

2. What has been accomplished to date?
   a. What learners said
   b. What education staff (both paid and volunteer) said
   c. What managers/supervisors said
   d. What the project team said
3. Should the program be continued and why?
   a. What learners said
   b. What education staff (both paid and volunteer) said
   c. What managers/supervisors said
   d. What the project team and discontinued learners said
4. What actions need to be taken to improve and expand the program?
   - Course content and teaching style
     a. What learners said
     b. What education staff (both paid and volunteer) said
     c. What managers/supervisors said
     d. What the project team and discontinued learners said
   - Location
     a. What learners said
     b. What education staff (both paid and volunteer) said
     c. What managers/supervisors said
     d. What the project team and discontinued learners said
   - Scheduling/time
     a. What learners said
     b. What education staff (both paid and volunteer) said
     c. What managers/supervisors said
     d. What the project team and discontinued learners said
   - Recruitment and retention
     a. What learners said
     b. What education staff (both paid and volunteer) said
     c. What managers/supervisors said
     d. What the project team and discontinued learners said
   - Staff development
     a. What learners said
     b. What education staff (both paid and volunteer) said
     c. What managers/supervisors said
     d. What the project team and discontinued learners said

Analyzing the data

The coordinator now had in front of her a pile of pages filled with responses. To help the team to analyze those responses, she first read through them and began jotting down her own personal observations, questions, ideas, and interpretations. She recorded these under the heading of "coordinator's interpretations."

She then sent to each team member a summary of the data gathered along with her personal interpretations. She asked each team member to essentially do what she just did: review the responses and jot down his/her personal interpretations.

In its third meeting (on August 6th), the team shared their interpretations, keeping in mind the following questions prepared by the facilitators:

Questions to Consider When Interpreting Data

- What conclusions can we draw from these responses? (How should we interpret these responses?" What reactions do you have?)
- Do certain points need clarification?
- Do you agree or disagree with particular points?
- Are there any surprises here?
- Are there any conflicts or contradictions in the data?
- Which recommendations should we "keep" in our final report?
- Which recommendations need to be changed?
- Which should we not include in our final report?

In response to each section of the data, team members brainstormed various observations, questions, and recommendations which were recorded on flipcharts.

Preparing a strategy for reporting the findings

To pull these findings together in one or more final reports for its intended audiences, the team agreed on the potential formats for each audience, who would be responsible for preparing draft reports, how and when they would be reviewed by the team, how and when the report(s) would be presented, and how the team should be prepared to take follow-up actions after the reports were presented. They prepared the following timeline, tying these elements together:

Preparing the VGH Report:
Things to Do

1. Audience: Aim at the President's Executive Council (PEC) in particular.
2. Formats: Prepare both an executive summary and a more-detailed version. Be sure to include all responses given.
3. Who responsible: Christine (the coordinator) is in charge of preparing the report, with help from others (including possible editing help from ABC CANADA). Explore getting another computer to help with editing.
4. Timeline for preparation of report:
    - Draft due: approximately September 6
    - Final report due: mid-September.
5. Presentation to PEC: approximately late September. (Training and Development representative will arrange this presentation.)

With that mandate, the coordinator prepared a final report, presenting each section of data and the team's recommendations for various concrete actions related to those findings. Also included in the detailed report was a brief history of the program, a history of the evaluation project, a description of the evaluation methodology, and appendices with details of the instruments and information sources used. An executive summary was included, summarizing key findings and the team's recommendations. (See Appendix.)

Reporting the findings

In late September, the coordinator circulated copies of the report to the team. They agreed that the team member with closest links to the team's primary audience, the President's Executive Council, would arrange to have the report presented to the Council and other intended audiences.

One of the first audiences to see the report was the new instructor who was replacing the outgoing project coordinator. She found that it helped her understand the program's history and needs.

In early December, the head of the Training & Development Department responded very favorably to the report. (See references to "the most senior management representative" under "Evaluating the evaluation" below.) He constituted the team's link to the President's Executive Council and had the authority to see that many of the report's recommendations were implemented.

Phase IV: Deciding what happens next

Taking follow-up action

To anticipate what evaluation-related activities might follow the presentation of the report, the team -- at the August 6th meeting -- reviewed its action plan of April 19th. Now that they were ending the first round of data-gathering activities, the team agreed to continue incorporating evaluation into its planning activities, emphasize the generation of quantitative data, and clarify what the new instructor should do regarding evaluation.

In reality, the team has taken the following actions since the report was presented to the various audiences:

- The program has been refunded at higher levels.
- A new coordinator was hired, with more hours than the previous coordinator had.
- Classes were resumed in the fall with 32 learners and 11 tutors (up from 20 learners and 10 tutors from the previous year). VGH continued to increase funding as additional learners signed up.
- VGH allocated permanent secretarial help, office space, and a classroom.
- The coordinator had, by early December, begun planning mini-workshops for learners as well as a student handbook.
- The instructor tried using tutors as aides in the math class. This idea, however, didn't work out as hoped and was discontinued.
- Three former participants are now serving as tutors, something not done before. Their department has given 50/50 release time to allow the participants to do this. (Their department head is a former tutor and team member herself, and has consistently championed the program.)

Due to major changes going on elsewhere in the hospital, by December several key team members were no longer able to attend team meetings. Those remaining on the team agreed that they needed "new faces" on the team, as "reinforcements."

Those who remained on the team also agreed that evaluation needed to be continued in some way -- even if not as extensively as had been hoped for in the original evaluation strategy -- because "it is too good to let go of completely." One option considered: reduce the number of data-gathering activities and concentrate on a team meeting in which members prioritize actions they need to take.

Evaluating the evaluation

In the August 6th meeting, the team assessed the evaluation process, as follows:

Team Members' Feedback About the Team Evaluation Process

Goals/expectations for the evaluation project:

VGH's expectatations:

- To learn how to evaluate the program.
- To develop a process of evaluation.
- To determine outcomes and needed improvements for the program.
- To get information needed to justify funding.
- To document the value of the program.

ABC's/U.S. National Institute for Literacy project's expectations:

- To develop a process of evaluation which others might adapt.

What was actually accomplished:

- All of VGH's expectations were achieved except developing more-specific, clear evidence of program outcomes, especially work-related ones. (But the team doesn't want a standardized test.)
- The team has in general now developed a foundation for further evaluation work.
- Timing of the project was good, as the team wanted to do an evaluation at just the time that the facilitators were looking for a site to work with.

Strengths and limitations of the project:

Strengths:

- The facilitators' help was fast, responsive.
- Their facilitative style "brought it out of us," helped team members do it themselves.
- VGH provided good support.
- Good documentation was kept of the project.
- Project built team identity, brought out members' strengths.

Limitations:

- Project took a fair amount of time.
- The facilitators were far away.
- Members didn't have a complementary computer and modem for easy communication, editing, etc.
- Data-analysis step could have been abbreviated with clearer guidelines.

How the process might be improved in the future:

- Give members training on data-collection before asking them to conduct interviews, etc.
- Get additional feedback from people who did data-gathering about how it went.
- Revise data-gathering tools used as soon as possible, so we don't forget problems we ran into or effective ways of using them.
- Pilot the tools and revise them before fully using them.
- Consider following up individually with members of focus groups, if it appears they might have more to say in private.
- Ensure larger/broader representation of supervisors when they are interviewed.
- Be careful not to be too ambitious in an evaluation activity (e.g., trying to gather too much information from too many sources.)
- Get learners to be more concrete and identify their goals on an ongoing basis.

Looking back on the process several months later, the original project coordinator raised several issues:

- There is a need to avoid using evaluation as a way of judging learners. Maintaining confidentiality is vital, to avoid threatening learners in any way by revealing information about their basic skills to others who might use it to manipulate learners.
- The facilitator needs to be careful not to over-influence team members' interpretations of the data. At the same time, there is a value in the facilitator sharing his/her interpretations, to provoke further thinking by other team members.

- The presence of "outside experts" as facilitators gave a certain legitimacy to the process, providing a kind of "checks and balances" to reduce the possibility that the internal team would allow their biases to shape the findings. The outsiders also were able to guide inexperienced team through the steps, helping to make the process as smooth as possible.

The coordinator also felt that the evaluation process had not only enabled her to contribute to the program but given her an opportunity to develop new professional skills. She called it "a fantastic experience," a high-point in her career.

Another team member felt that the evaluation helped create a solid foundation for the program, particularly by establishing good relations among stakeholders. This -- coupled with the good word put out by satisfied learners -- led to increased attendance. She also felt that the report showed that the program was "accountable." She will include a summary of the report's recommendations (especially for a full-time instructor) when she submits the next funding proposals.

The most senior management member on the team was reportedly very pleased by the report and the evaluation process. He felt it was done professionally, and he felt its use of a number of informants gave the process validity. He felt it provided a road map to follow, a shared vision for the program's future. This was particularly important to him, as he was relatively new to the education program.

He was also pleased that the recommendations were realistic and that team members took the initiative to begin carrying out many of them, without waiting for him to locate resources and figure out how to respond to the report. This showed the potential of the self-directed work teams being implemented in the hospital.

Two months after completing the report, the team continued to refer to its recommendations, using them as a guide to see "how are we doing." However, some of the key players on the team have now left, due to changes in personnel unrelated to the evaluation process.

IV. REFLECTIONS

Facilitator Paul Jurmo's comments:

The VGH team was successful in producing a useful evaluation for several interrelated reasons:

- Team members were motivated to do an evaluation from the start, having requested help. They thus saw a need and saw the value in committing time into the process. This allowed them to be flexible and patient, willing to work with the facilitators to adapt the evaluation process to their own situation.
- Several team members had considerable expertise in adult education, evaluation, or other relevant areas. Those lacking such experience were nonetheless open -- and felt safe enough -- to stretch themselves and take on new roles in the evaluation process.
- The hospital gave members the time and other resources they needed to participate in the process.
- The education program had already created a climate of good will among team members. This contributed to a sense of trust and an interest in working together further on the evaluation.
- They had an audience who had a demonstrated interest in the program, making it worthwhile for the team to go through the effort of collecting considerable information, analyzing it, and reporting it.
- The team had a good mix of perspectives, including one program participant. All team members seemed willing and able to participate actively.

The process did not produce the kind of quantitative data on program impact which the team felt its primary audience would like. Instead, the evaluation produced less-easily-quantifiable data on impact and focused more on formative feedback on how to improve the program.

The process did take time (three day-long team workshops plus preparation, data-gathering, report-writing, etc. by individuals). This investment of time, however, seemed to produce useful results.

The evaluation produced useful information about the possible formats and content of a workplace education evaluation. It also produced useful information and analysis about one particular program, something rare in the workplace education literature. Team members also developed expertise in various facets of evaluation work, and demonstrated the potential of shared decision-making in the workplace.

VICTORIA GENERAL
HOSPITAL

APPENDIX

EVALUATION OF THE
WORKPLACE EDUCATION PROGRAM
VICTORIA GENERAL HOSPITAL
HALIFAX, NOVA SCOTIA

Prepared By
Christine Garlick-Griffin
September, 1993

TABLE OF CONTENTS

Acknowledgements [p.iii]
Executive Summary [p.iv]
Definitions [p.x]

I. INTRODUCTION [p.1]

- A. Overview of the Evaluation [p.1]
- B. Organization of the Report [p.1]

II. WORKPLACE EDUCATION PROGRAM AT THE VICTORIA GENERAL HOSPITAL [p.1]

- A. Program History [p.1]
- B. Program Goals [p.2]
- C. Program Philosophy [p.2]
- D. Program Principles [p.2]
- E. Continuous Quality Improvement [p.3]
- F. Program Components [p.3]
- G. Physical Setting [p.3]
- H. Potential Learners [p.4]

III. METHODOLOGY [p.4]

- A. Introduction [p.4]
- B. Purpose of the Evaluation [p.4]
- C. Why This Type of Evaluation [p.4]
- D. Steps in the Evaluation Process [p.5]
  - i. Preparation Activities [p.5]
  - ii. What Did the Team Want to Know? [p.5]
  - iii. Who Were the Sources of this Information? [p.5]
  - iv. Collection Methods [p.6]
  - v. Arranging the Interviews [p.6]
  - vi. Advantages and Limitations of this Approach to Evaluation [p.7]
    - a. Advantages [p.7]
    - b. Limitations [p.7]

IV. FINDINGS [p.8]

- A. Introduction [p.8]
- B. What Have Been the Goals of the Program? [p.8]
  - i. Learners [p.8]
  - ii. Learners Who Discontinued the Program [p.8]
  - iii. Education Staff [p.9]
  - iv. Management/Supervisors [p.9]
  - v. Project Team [p.9]
  - vi. Summary [p.10]
  - vii. Conclusions [p.10]

C. What Has Been Accomplished to Date? [p.10]

  i. Learners [p.10]
  ii. Education Staff [p.11]
  iii. Managers/Supervisors [p.12]
  iv. Project Team [p.12]
  v. Summary [p.13]
  vi. Conclusions [p.13]

D. Should the Program be Continued and Why? [p.14]

  i. Learners [p.14]
  ii. Education Staff [p.15]
  iii. Managers/Supervisors [p.15]
  iv. Project Team/Discontinued Learners [p.15]
  v. Summary [p.15]
  vi. Conclusions [p.15]

E. What Actions Need to be Taken to Improve and Expand the Program? [p.16]

  i. Course Content and Teaching Style [p.16]
  ii. Learning Location [p.17]
  iii. Scheduling/Time [p.17]
  iv. Recruitment and Retention [p.17]

    a. Worksite [p.17]
    b. Learning Environment [p.18]
    c. Distributing Information [p.18]

  v. Summary [p.19]
  vi. Conclusions [p.19]

F. The Project Team Reflects [p.14]

V. RECOMMENDATIONS [p.20]

  A. Introduction [p.20]
  B. Short-Term Recommendations [p.21]
  C. Long-Term Recommendations [p.22]
  D. Summary Statement [p.23]

Appendix [p.24]

References [p.37]

BEST COPY AVAILABLE

ACKNOWLEDGEMENTS

The team members who carried out this evaluation are:

Angie Gillis, Dietetic Internship Coordinator, Food and Nutrition Services

George Mumblo, Manager, Modern Cleaners

John Rait, Assistant Manager, Modern Cleaners

Carlotta Weymouth, Food and Nutrition and Union Representative for C.B.R.T. and G.W.

Dale Walker, Supervisor, Food and Nutrition Services

Jessie De Baie, Workplace educator, Department of Education

Darcy Rhino, Workplace educator, Department of Education

Christine Garlick-Griffin, Workplace educator, VGH 1992-1993

Consultants to this Evaluation:

Sue Folinsbee, Workplace consultant, ABC Canada, Toronto, Canada

Paul Jurmo, Researcher, Literacy Partnerships, Jersey City, New Jersey

Special thanks to:

Wayne Marsh, Director of Planning and Evaluation, for input at the planning workshops and ongoing support of this evaluation.

Shirley MacIntosh, Director of Food and Nutrition Services, for catering working lunch on August 6.

George Mumblo and John Rait, Modern Cleaners, for catering working lunch on April 19.

Jane Williams, consultant, Training and Development, for facilitating the focus group with managers/supervisors.

Corinne Cormier and Rhonda Haines, Training and Development, for clerical assistance.

This Evaluation was funded by: The Victoria General Hospital, ABC Canada and Literacy Partnerships, Jersey City.

EXECUTIVE SUMMARY

I. INTRODUCTION

The Workplace Education Project Team of the Victoria General Hospital, in consultation with ABC Canada and Literacy Partnerships, Jersey City, planned and conducted an evaluation of the Workplace Education Program.

This process necessitated that members of the project team acquire an in-depth knowledge of the program, and become versed in evaluation skills. These individuals exemplified the team spirit as they worked towards their goal.

Learners and instructors past and current, volunteer tutors, management/supervisory staff and the project team were interviewed for this report; a total of thirty-eight individuals.

The evaluation serves a number of purposes. It provides information about the principles and practices of workplace education, examines goals and achievements to date, and offers suggestions for planning future programs. Such documentation provides information of potential use in funding decisions. The team made the following conclusions based on their analysis of the data.

II. CONCLUSIONS

Conclusions are discussed in order of the four major questions asked in this evaluation.

A. What have been the goals of the program?

Most participants have a clear understanding of program goals. Learners, education staff, some supervisors and project team understand the range of needs and interests being met by this program.

Some supervisors need a clearer idea about workplace education, what its purposes are, and how they can support learners in the area of release time as well as giving them more challenges on the job.

Learners are better able to work out suitable arrangements for attending workplace education after supervisors are well informed about the program.

B. **What has been accomplished to date?**

The program has been successful in achieving its goals. It has also achieved unanticipated benefits for individual learners, others who participated in the program, and the organization.

Some unanticipated benefits include increased morale, self-confidence and greater participation in departmental activities. In addition, the program and its evaluation is now a model for other workplaces in Canada and the United States.

Hospital employees gained on the job, skills and self-confidence as a result of tutoring in the workplace education program.

There is confusion about confidentiality. Supervisors need to be clear about this issue. "We are in a Catch 22 situation; maintaining confidentiality versus getting support from supervisors. Supervisors can't help participants if they don't know who the participants are".

There is a need to define each of the two areas in which "confidentiality" can be an issue.

1. knowledge of employee participation
2. employee goals and progress

C. **Should the program be continued and why?**

Learners, education staff, supervisors and project team want the program to continue for work-related as well as personal reasons.

D. **What actions need to be taken to improve and expand the program?**

The on-site location is convenient and accessible for employees; however, a permanent class and office space are required.

The no-cost policy increases access for employees.

Employees like the option of working with tutors as well as the "learner-centred" approach which encourages input from learners into content, materials, homework and so forth.

Instructors can feel a sense of professional isolation. They need support within the Victoria General Hospital and also from colleagues in other organizations.

Scheduling of classes is important. The time of day and/or other priorities can cause some employees to discontinue the program.

The team made the following recommendations based on the above conclusions.

III. RECOMMENDATIONS

A. Introduction

The following short-term recommendations should be implemented prior to starting the '93-'94 workplace education program.

The long-term recommendations will take time to develop and implement. However, the project team, coordinator and instructor should begin work on them immediately. An overall plan which develops goals and a time-line for implementing these long-term recommendations should be established with the first or second meeting of the project team in the '93-'94 workplace education term.

Those recommendations which involve hospital personnel other than workplace education staff and project team are suggestions put forth for their consideration.

B. Short-term Recommendations

Classes are to continue to be held on-site but in a location that does not require moving the class from room to room.

> Option A: Get a large room for classes that have a phone and space for administrative work and filing
>
> Option B: Provide office space and a separate classroom. Both are to be dedicated to workplace education only.

Continue:

> to offer a tutor training course and have volunteers work one-on-one with learners.
>
> to build a library of materials
>
> to have the coordinator, instructor and tutors available to assist learners and supervisors with scheduling arrangements and any other needs.

Increase instructor's hours for one-on-one program-related counselling and extra academic assistance.

Offer greater flexibility in terms of class times to accommodate shift and personal demands. Potential learners are to continue to have input into most suitable class times.

Provide the option of more time for each class/learning session. Each class negotiates how much time it needs/has available.

Encourage tutors to help in group math classes as the instructor sees the need.

Give supervisors a minimum of two week's notice of class start date and schedules.

Improve communication and increase information to supervisors about program goals and purposes.

Supervisors should be kept informed about the program in general, whether or not they know identities of individual participants.

The coordinator and instructor should expand the current practices for recruitment, orientation and retention. Incorporate suggestions set forth in this report.

C. Long-Term Recommendations

Develop clear guidelines about confidentiality.

Option A: Supervisors know identity of learners, who are able to attend partly on hospital (release) time.

Option B: Supervisors do not know identity of learners who then participate on their own time.

Supervisors should maintain confidentiality but continue to support employees.

The project team should propose a 50/50 release time policy, with the hospital's share being either release time or equivalent. But consider ceiling for the maximum number of hours an employee attends classes.

Develop a handbook for all levels of employees which outlines the purpose and practice of workplace education.

Develop awareness workshops for supervisors. Within these activities, clarify how supervisors should respond if an employee approaches them with a basic skill problem.

Involve supervisors experienced with workplace education as co-facilitators in awareness sessions.

Expand the topics and have more mini-courses. Memo-writing, telephone skills, public speaking and report writing are some suggestions. These short sessions will decrease schedule readjustments on the work-site and reach more people with special needs and interests.

Include purchase of a computer in selection of equipment and materials.

Investigate resources to assist learners with information about continuing education. Start with Nova Scotia Community College (NSCC) and Employee Assistance Program (CARE) and unions.

Investigate other funding partners. Funding may be sought for specific activities in contrast to overall program development.

Continue to search for sources (time and funding) for professional development.

Workplace education instructor should be full-time staff member with the Training and Development Department.

The status of Workplace Education is to be raised to that of other training programs in the hospital.

D. Summary Statement

The evidence shows that overall, the Workplace Education Program has worthwhile goals. The achievement of such goals has benefitted individuals and the organization. In addition, unanticipated but welcome outcomes have resulted. Implementation of the short and long term recommendations will ensure that not only will quality programming continue, but some areas of the program will be improved and expanded.

A special characteristic of this evaluation is that the team has been involved in the entire process. They planned the strategy, conducted the interviews and analyzed the data for conclusions and recommendations. This unique approach ensures that the evaluation questions: "...stem from the information needs of relevant and identified decision makers and information users." (Patton, 1978, p. 201). Furthermore, the skills gained by the employees involved in this process remain with the organization for application in other areas.

The project team is to be given credit for their hard work and dedication to a program which has touched the lives of many and made significant changes in the lives of others over the past three years.

The Victoria General Hospital is to be commended for providing such a program. Since implementation of this evaluation, increased funding has been approved for 1993 - 1994.

DEFINITIONS

Supervisors/Managers:	used throughout this report to include department heads,managers, supervisors
Learners:	Employees who participated in a tutoring relationship or classes
Release time/ Time share/ Matched time:	Arrangement an employee makes with employer to have part of time spent in classes or with tutors paid by employer or the time spent on shift is reduced by a percentage of time employers is in classes or with tutor

I. INTRODUCTION

A. Overview of the Evaluation

At the January 1993 meeting of the Project Team, Christine Garlick-Griffin, Instructor, gave a presentation on the value of the *team approach* to formally evaluating the Workplace Education Program. The team agreed to proceed, and Sue Folinsbee, workplace consultant to ABC Canada and Paul Jurmo, researcher, Literacy Partnerships, Jersey City, United States, provided consultation. They are incorporating elements of this evaluation into workplace education research in Canada and the United States.

In addition to ongoing long distance communication, the team held three days of workshops with Sue and Paul at the Victoria General Hospital (VGH). An evaluation action plan was established and finally the data analyzed for conclusions and recommendations. The process and results are documented in the following report.

B. Organization of the Report

Section two describes the Workplace Education Program. Section three discusses methodology. Section four presents the findings. Section five lists recommendations.

II. WORKPLACE EDUCATION PROGRAM AT THE VICTORIA GENERAL HOSPITAL

A. Program History

In the fall of 1990, Angie Gillis, then consultant for Training and Development at the hospital, attended an information session on workplace education programs at what is now the Literacy Division of the Nova Scotia Department of Education. Angie recognized the value of such a program. She presented her ideas and the hospital agreed to the implementation of a Workplace Education Program.

Six employees from Food and Nutrition Services registered for this first program in 1990 - 1991. The following year the program was expanded to include housekeeping and the laundry departments with approximately 25 registrants. The Department of Education delivered the program both years. They supplied one instructor in 1990 - 1991 and two in 1991 - 1992 program.

In 1992 - 1993, the hospital funded a part-time person to plan the program, instruct classes and coordinate volunteer tutors. The Department of Education continued their support. They provided a thirty hour training session for 10 volunteers, including eight hospital employees, to become tutors, offered ongoing professional development for the workplace person, maintained two seats on the project team and provided consulting services on an as-needed basis. The 1992 -1993 program expanded to eight departments and registered 20 learners.

At present, the program is situated with Training and Development and coordinated by Angie Gillis who is presently with Food and Nutrition Services. The Workplace Education Program began in 1990 and at the writing of this report is preparing for its fourth year.

B. Program Goals

The goals of the program are:

> "To enable participants to develop self-esteem, reading, writing, oral English and math skills needed to solve problems they identify as of interest to themselves".

In other words, the program has a learner centered approach. Some learners may choose to learn a specific skill such as applying percentages in the workplace or memo and report writing. Others may study for the Grade Twelve Equivalency Exam (GED).

C. Program Philosophy

In contrast to the more traditional "school" approach to education, the program incorporates adult learning/teaching principles. Learners define their needs and interests and take responsibility for their learning. Furthermore, this approach encourages active participation in program planning and curriculum development.

D. Program Principles

An empowerment model of workplace education has been implemented. This model assumes employees have highly developed skills in some areas but may want to upgrade basic skills. Other principles of workplace education practiced include:

- voluntary participation
- confidentiality of individual's progress

E. Continuous Quality Improvement

The content, philosophy and principles of the Victoria General Hospital Workplace Education Program reflect the values of Continuous Quality Improvement (CQI). The program provides an opportunity for frontline employees to improve computation, reading, writing and problem solving skills. Such skills are a pre-requisite for achieving those aspects of CQI which encourage increased morale, teamwork and better overall performance in the workplace.

F. Program Components

The program consists of the project team, small group learning or classes and volunteer tutors.

The project team is the liaison between the worksite and the program and advises the instructor on workplace issues. It meets on a monthly basis or more often in the case of special projects such as the evaluation. The project team has representatives from management, union, Department of Education, tutors and learners and is coordinated by the workplace instructor.

The classes are small groups of employees which usually number no more than twelve. They are organized so that the instructor/learner interaction is a mixture of one-to-one and small group instruction.

Learners who are either unable to attend classes or prefer one-to-one learning situations are matched with one of the specially trained tutors. Tutors and learners take responsibility for organizing what they will learn, when and where they meet and prepare a report for the instructor monthly. In addition, tutors and instructor meet on a regular basis to share ideas and concerns.

G. Physical Setting

All classes are held at the hospital in the Bethune Building. Rooms are booked for the two hour sessions. There is no consistency in space allocation from class to class. Materials and flipcharts are carried to and from each class. The 1992 - 1993 program was fortunate in the latter part of its term. Marlene, in roombooking, made special arrangements with Allied Health Services for temporary loan of a teaching room in Bethune. Temporary office space, first with Training and Development, then on the fifth floor in the Bethune Building was also provided.

H. Potential Learners

The Program is open to any hospital employee who chooses to learn or refresh basic skills. To date, learners have included employees from Food and Nutrition, Modern Cleaners, NovaCos Cleaners, Laundry, Central Escort Services, Bio-Medical and three nursing units. Employees in supervisory positions also register in this program.

In summary, the history, description and rationale for workplace education have been discussed. In the following section, the evaluation methodology is examined.

III. METHODOLOGY

A. Introduction

In this section of the report, purposes for evaluating the program are discussed, reasons for using this particular model are explained, the major steps in the process are described and finally, the advantages and limitations of this approach are presented.

B. Purposes of the Evaluation

This evaluation serves a number of purposes: 1) assists with funding decisions; 2) provides information about the purposes and practice of workplace education; and 3) documents program accomplishments as well as suggestions for improving or expanding the program.

C. Why this type of Evaluation

The Workplace Education Program at the Victoria General Hospital does not lend itself to being judged on a single criterion of academic achievement. The broader approach, which includes analyzing program context, is in keeping with adult education principles and is more effective in demonstrating the worth of the program.

Furthermore, the *team approach* referred to in this document is quite different from a traditional evaluation in which one or more trained individuals work together only for the purposes of carrying out an evaluation. The *team* is made up of mostly hospital employees who represent various interest groups in the hospital. These team members are dedicated to ensuring good quality programming for the employees.

D. Steps in the Evaluation Process

The team decided to proceed with this evaluation on January 27. They met eight times over a seven month period. The final workshop was held on August 6, 1993.

i. Preparation Activities

Initial meetings of the evaluation team focused on group discussion and analysis of the concept of evaluation and its application to the Victoria General Hospital Workplace Education Program.

The team stated:

"OVERALL: Through discussion and research...we can decide what we want to know, why and how to start getting that information. We need to rework guesswork so we can instead develop a simple and useful evaluation strategy. (That is, provide us with a clear, concrete, and unequivocal direction for our evaluation activities)."

Following this preparatory phase, the team proceeded through the following steps:

- decided what kinds of information they wanted to know
- decided who they would gather this information from
- prepared the appropriate instruments
- gathered the data
- organized, analyzed and interpreted the data
- prepared the final report

ii. What did the team want to know?

The team wanted answers to the following questions:

- What have been the goals of the program?
- What has been accomplished to date?
- Should program be continued and why?
- What do we need to do to improve and/or expand the program?

In order to get this information, each of the above was further divided into questions which would elicit more detailed responses. (See appendices)

iii. Who were the sources of this information?

- past program participants
- current program participants
- Management/supervisory staff who had employees in the program

- instructors and tutors (past and current)
- individuals who came for initial interview but did not register and those who started the program but discontinued (referred to as discontinued learners/participants)
- project team

Although forty-three (43) responses make up the data for this evaluation, it was provided by thirty-eight (38) individuals. This overlap occurs because five (5) of the project team were also interviewed in their other roles.

No particular selection process dictated who in each of these groups would be interviewed. Availability and willingness to be interviewed were the only criteria.

iv. Collection Methods

Individual face-to-face interviews, focus groups as well as questionnaires and one telephone interview were used to gather information. From a discussion group on March 29, Sue and Paul recorded responses form eight project team members. Individual interviews were conducted with eight 1991 - 1992 learners, three 1992 - 1993 tutored learners, three discontinued learners and one tutor. One discontinued learner was interviewed by phone. Six supervisors were interviewed in a focus group. One supervisor who could not attend the focus group provided a written response. Eight 1992 - 1993 learners were interviewed in a focus group. Three instructors and one tutor provided written responses to the questions.

Objectivity was maintained by asking the same questions to all members of the same group. Most questions were open-ended.

v. Arranging the Interviews

Six members of the evaluation team and a consultant from Training and Development conducted the interviews and focus groups. Interviewers and interviewees were matched to get maximum objectivity. For instance, an instructor did not interview his/her learner. All interviewees were promised confidentiality. Individual interview times ranged from approximately one-half to one hour. Focus groups took one and one-half hours. Interviews took place at various locations within the hospital including the classroom and cafeteria. In some instances, there was difficulty making contact with potential interviewees as well as finding mutually convenient times for interviews. As a result, two (2) learners, two (2) discontinued learners and one (1) supervisor did not get interviewed as originally planned.

vi. Advantages and limitation of this approach to evaluation

a. Advantages

This evaluation examines perceptions and opinions of those involved in workplace education. Cyril Houle (1972), well known adult educator and researcher, states:

> "The analysis or planning of educational activities must be based on the realities of human experience..." (p. 32).

The consultants who facilitated the process were outside the organization and had no stake in the results. Furthermore, the *team* approach ensured all interest groups were represented as well as maintained a degree of objectivity in the process.

Validity of the results is demonstrated by the many similarities in responses from the different sources. Furthermore, the similarities remained consistent whether the data was gathered by face-to-face interview, questionnaire or focus group.

The members of the evaluation team have new skills which can be used in future evaluations of the Workplace Education Program as well as in other aspects of their work.

b. Limitations

It is recognized that in a qualitative evaluation some subjectivity exists.

As indicated, a variety of methods were used to collect data including focus groups and interviews. All methods have advantages and disadvantages. For instance, in focus groups, some individuals may be reluctant to express opinions which they feel do not meet with favour from the rest of the group. This situation is more likely when supervisors and management from varying levels in the organization are in the same focus group. Also, some learners may feel intimidated in face-to-face interviews. This could result in limited responses to some questions.

In summary, this section on methodology explained the purpose, rationale and the steps in the evaluation process. Also, the advantages and limitations of such process are explained. In the following section, findings are discussed.

IV. FINDINGS

A. Introduction

The findings are presented in four sections. In each of the first three, summaries of the responses are organized according to the *sources* of information. The fourth is organized according to *types* of information. Conclusions are found at the end of each section. The sections are:

- What have been the goals of the program?
- What has been accomplished to date?
- Should the program be continued and why?
- What actions need to be taken to improve and expand the program?

B. What have been the goals of the program?

Goals of the program have been identified by the groups interviewed as increasing basic skills and self-confidence for work-related, academic and personal reasons.

i. Learners

Fifty-three percent (53%) of the learners interviewed stated they wanted credit for Grade Twelve Equivalency (GED). Others wanted to increase their skills in math, writing and reading. Interest in improving memory, learning ability, study skills and self-esteem were also expressed.

Learner Comments

- "Main goal - to receive a high school diploma."
- "I wanted to learn more writing and math. Before I started, I only knew how to write my own name...I don't feel as bad about school as I used to."
- "Being relaxed. Learn about your self-esteem."

ii. Learners who Discontinued Program

Three of the four interviewed stated they had hoped to get their GED. Helping children with school work, learning math and to public speak were also stated.

Discontinued Learner Comments

- "I had hoped to get a better understanding of math. I got a lot of confidence when I was in the program ...I would have liked to do more public speaking."
- "Grade XII and learning a little bit more."

iii. Education Staff

The education staff observed that learner's work-related goals included responding to department memos, filling out forms and preparing for other jobs and promotions. Learners wanted GED in order to pursue other education and for self-satisfaction. Personal goals such as budgeting, using cheque book and helping children were noted. The 1992 - 1993 class wanted GED, math, communication (reading and writing), self-esteem and teamwork for personal, community and work-related application. Staff noted that most common goals were math, oral communication and writing.

Education Staff Comments

- "Main goals of my learner-improve writing and math skills to feel more confident in filling out forms and responding to department memos."
- "They...wanted the ability to write effectively and communicate orally...at some point to write GED but many wanted to think about other jobs and promotions."
- "Others wanted to improve their writing, reading or math skills for their own satisfaction, to help their children or go on to further education."

iv. Managers/Supervisors

Two supervisors stated they had no particular expectations of their employees. Once said "no pre-conditions" placed on employee. Others hoped for increased self-confidence, improved problem-solving and communication skills.

Some of the six supervisors were unclear about individual and program goals. One said more was learned as the program progressed and another stated: "should know more before our employees become involved."

v. Project Team

The eight members of the project team identified a number of goals, many for work-related purposes. They talked of the need for math and writing skills to check information on job-related requirements and procedures, to read recipes and menus in food services area, and to understand "universal precautions" to speak up with ideas and get to know other employees. They also saw the program as an opportunity for employees to assist children with homework, get their GED and feel more respected by others.

vi. Summary

Learners have many reasons for participating in workplace education. They want to perform better on the job, to pass the GED and to function better in their personal lives. Learners, education staff, the project team and some supervisors understand that the program serves a specific academic need as well as providing practical and useful skills. Some supervisors are unclear about program purposes.

vii. Conclusions

Most participants have a clear understanding of program goals. Learners, education staff, some supervisors and project team understand the range of needs and interests being met by the program.

Some supervisors need a clearer idea about workplace education, what its purposes are, and how they can support learners in the areas of release time as well as giving them more challenges on the job.

Learners are better able to work out suitable arrangements for attending workplace education after supervisors are well informed about the program.

C. What has been accomplished to date

Skills and confidence to perform better in the workplace, GED credit and/or increased academic achievement as well as practical skills to assist in the home and community are results of the workplace education program.

i. Learners

Sixteen (16) of nineteen (19) learners stated they were 70%-100% successful in achieving their goals. Others stated they were in the process of achieving their goals but more time was needed. The 1992 - 1993 learners wanted it to be clear that their reasons for not fully meeting goals were not related to the course but were for other reasons such as illness or not yet having written their GED exam.

Eleven (11) learners mentioned self-confidence and eight (8) of those stressed its importance. In addition, examples of increased self-confidence were cited. One supervisor is no longer afraid when training new employees. Better leadership ability, more confident at trying new things, no longer afraid to speak out and decreased shyness were also noted. The 1992 - 1993 learners emphasized that they are now more aware of their knowledge and abilities.

Other examples of what was accomplished: math, reading, writing, oral communication, expression, social skills (meeting and learning about other employees), creativity, time management, accepting criticism, making a commitment, helping kids with school work, asking questions, expressing opinions and teamwork.

Learner Comments

- "Can train without fear."
- "Not afraid to give opinion--couldn't before."
- "How to manage time between work, family and education."
- "I understand what I read now which helps me to relate to my daughter."
- "Learned to write a story. Had never written a story before in my life."

ii. Education Staff

All staff noted that learners achieved a wide range of behaviours and attitudes. In addition, they estimated learner's success as 70%-100% in achieving their intended goals. Frequently stated accomplishments include: increased social skills such as self-confidence/worth, interpersonal skills and teamwork. Problem-solving skills such as handling tensions at work and increases in academic learning are also noted. One instructor said that not only did learners discover that their input and participation were welcome and valued in the Workplace Education Program, but these skills transferred directly to increased input at work.

Education staff also noted unexpected benefits resulting from the program. One tutor became much more aware of importance of readability of hospital materials and sensitized to the teaching and counselling methods she used in her work as an hospital employee. Another found the tutoring particularly challenging but gained personally because it resulted in a positive experience for both tutor and learner. The program also resulted in the Victoria General Hospital having increased visibility as a workplace education model nationally and internationally.

Education Staff Comments

- "They valued that their input and participation is welcome and valued which translates directly to increased input at work."

- "They learned how to solve problems and think independently. They gained teamwork skills...Some even applied for other programs. As a result, they recognize the importance of training at work."

- "To analyze one's problems, verbalize a solution and act on it."

- "To surmount workplace and personal barriers to learning."

iii. Managers/Supervisors

Fifty percent (50%) of the six (6) managers/supervisors interviewed observed an increase in learner/employee self-confidence. One of the six noted a decrease in one employee. Others noted more assertive behaviour in the workplace and more involvement in staff meetings and other department activities. One supervisor noted that a learner who was formerly secretive about attending the program became more open about it. Another observed learners talking about the benefits of the program to other employees. Furthermore, other workers are now interested in joining the program and in most cases, other workers are supportive of co-worker involvement.

Some of the six supervisors interviewed had concerns. For instance, one noted some stress levels rose due to increased workloads and schedule changes. One found it time consuming to decide about release time. "Has had to search...soul. Have been unable to allow her to attend on work time--in order to be fair to other staff who might request time off for education...". Another supervisor had a question: "Is it fair to one staff member if they cannot attend on work time, if those in other departments can?" Confidentiality was also an issue. One supervisor said: "The desire for confidentiality may leave out supervisor who may need to be involved in timing."

iv. Project Team

The project team described a wide range of program strengths. They observed that the program fills a real need, has support from all levels and the organization doesn't place undue demands/stress on the program and learners. Not only regular workers, but supervisors also take classes. One member states: "It is the most significant staff development opportunity at the VG."

They noted that the 1992 - 1993 program had eight (8) departments involved. Many departments have established a paid release policy, developed flexibility with scheduling and respect that learner's skill levels and participation are confidential.

They state that the program is flexible and responsive to individual needs, "employees don't get lost in unresponsive groups." Tutors are mentioned specifically for their flexibility and responsiveness. The on-site location and time of program is also convenient.

As a result of the program, learners develop self-esteem and motivation. Their participation is also supported by friends and co-workers. Furthermore, other departments, such as print shop, audio visual, Training and Development and Food and Nutrition Services offer concrete support.

v. Summary

Learners, education staff, supervisors and project team talked about a wide range of behaviours and attitudes achieved as a result of workplace education. They observed that not only individual learners but other program staff and the organization benefitted.

Overall, learners were successful completing their goals within the twenty-four weeks. In addition to improving basic skills, many experienced increased self-confidence on the job and in their daily lives.

Some supervisors expressed concerns about stress, arranging schedules, workloads, release time and the issue of learner confidentiality.

Unexpected benefits include volunteer tutors applying knowledge and skills learned in workplace education to their work as hospital employees dealing with patients. Also, the program now serves as a model in Canada and the United States.

vi. Conclusions

- The program has been successful in achieving its goals. It has also achieved unanticipated benefits for individual learners, others who participated in the program, and the organization.
- Some unanticipated benefits include increased morale, self-confidence and greater participation in departmental activities.
- Hospital employees gained on-the-job skills as a result of tutoring in the Workplace Education Program.

- There is confusion about confidentiality. Supervisors need to be clear about this issue. "We are in a catch 22 situation; maintaining confidentiality versus getting support from supervisors. Supervisors can't help participants if they don't know who the participants are."

- There is a need to define each of the two areas in which "confidentiality" can be an issue:

  1. knowledge of employee participation
  2. employee goals and progress

D. Should the program be continued and why

All individuals stated the program should be continued.

i. Learners

All learners interviewed stated the program should continue. The 1992 - 1993 learners want it known that they felt strongly about the program continuing.

Learners stated a number of work-related reasons for wanting the program to continue. For instance, employees have experienced many changes in the workplace over the years. They stated that the program helps employees to respond when changing job requirements demand an increase in math and English skills. They feel the skills gained from the program help them do their job better and state the hospital benefits from better trained employees.

Personal reasons stated for wanting the program to continue are the benefits gained from an increase in self-esteem, a sense of accomplishment and the opportunity to continue learning.

Learner Comments

- "Learn to do what your job needs you to do."
- "The workforce has changed so much."
- "It helps the bottom line."
- "It's good for a lot of people."
- "Crazy if you don't take it."

ii. Education Staff

Education staff elaborate on their suggestions for expanding and improving the program in the next section.

iii. Managers/Supervisors

All seven (7) agreed that the program should continue. Some supervisors noted the program fills personal development as well as academic skills needs. They stated that even if an employee does not reach the desired reading goals within the time limits of the program, the employee is better off because of increased self-esteem. Another said that if employees lack basic skills, an opportunity should be made available to them. Another supervisor writes: "I want to take this opportunity to comment. I feel this is a marvellous opportunity for staff and I certainly hope the program continues."

One supervisor stated they did not want the program abused by employees, but did not elaborate on this. Another stated that we are not coming close to preparing our employees for the future.

iv. Project Team/Discontinued Learners

The project team and discontinued learners give suggestions for continuing and expanding the program in the next section.

v. Summary

All learners, education staff, supervisors and project team clearly state the program is worthwhile and should continue. Skills learned assist employees to respond to ongoing changes in the workplace and to challenges in their personal lives.

vi. Conclusions

- Learners, education staff, supervisors and project team want the program to continue for work-related as well as personal reasons.

E. What actions need to be taken to improve and expand the program?

There is evidence that Workplace Eduction has been successful, to date, in meeting learner needs. However, for planning purposes, learners, education staff, management/supervisors, discontinued participants, and the project team were asked for program improvement suggestions. In addition, many ideas were offered for expanding the program. The responses are discussed under course content and teaching style, location, scheduling/time, as well as recruitment strategies.

i. Course Content and Teaching Style

Learners generally liked the content and teaching styles. They liked the easy-going, friendly, respectful, dedicated, fun, unpressured learning environment. Staff indicated that learners should continue to get what they "want or need" maintaining a sense of program ownership and continuing to focus on applied purposes/uses for learning.

All groups suggested expanding instructional areas. English as a second language (ESL), special help responding to learning disabilities, dealing with the issue of clear language and additional work-related topics such as memo writing, telephone skills, public speaking and computer training are stated.

In addition, learners and education staff suggest more instructor's time be available for learners outside of class hours and there should be an opportunity every year to write GED at the hospital. Also, some learners would like more one-on-one assistance in class with the help of volunteer tutors.

Education staff note the importance of continuing Angie Gillis' role of coordinator, the one-to-one tutoring component, and the tradition of respecting employee confidentiality. Suggestions include purchasing a greater variety of materials, including a computer. Education staff and project team recommend there should be continuity from year to year in instructional staff. Furthermore, the project team suggests that opportunities be provided "on the job" to use and practice new skills gained in the program.

The staff stated they would like more time and/or funds budgeted for professional development. It is beneficial for instructors to meet with other workplace educators on a regular basis. In addition, the instructor's position within the organization requires the same security and benefits other employees receive. This is a necessary step towards increasing the status and continuity of the program.

ii. Learning Location

The convenience of on-site location and cost-free access to program is, according to both learners and education staff, one of the program's strengths. The on-site location also serve to increase communication and good relationships between departments.

Learners, education staff and project team emphasize the need for a permanent classroom and office space.

iii. Scheduling/Time

There is a general agreement that more choice of class times would accommodate different shifts and departments. The instructor needs flexibility to work with all employee schedules. Learners have requested that classes be three instead of two hours in length and the number of classes increased. Some tutors also expressed frustration with teaching/learning sessions that are sometimes as little as one-half to an hour in length. There is general agreement that paid release time is important, although some learners did not take advantage of it. One said: "I was on my own time. I liked it better that way. It was no strain on me or my employer." The project team indicates that the release time policy is sometimes unclear.

iv. Recruitment and Retention

Suggestions for recruitment and retention relate to the work site, learning environment and distribution of program information.

a. **Worksite**

One learner says that concerns about work piling up and burdening them when they return from class should be dealt with. Education staff agree that learners should not have to "make-up" work not done or be given less pay. Learners say to explain that class is free and there is also a paid release policy. They advise orientations for supervisors, head nurses and other administrators, letting them know program benefits including "better educated staff able to do their job better and do new things as well as getting prepared for promotion."

In addition, education staff state it is necessary to educate supervisors about the need for shift flexibility and to commit to matched time. Furthermore, learners should be able to be comfortable approaching supervisors about time off for class. Learners offered this advice: "Realize that current and potential learners might be nervous/shy. Give special encouragement while at the same time not coercing them." Education staff suggest that learners have the support of supervisors and co-workers. They recommend better communication about time-sharing, expectations and so forth, between management/supervisors, instructors and learners.

b. Learning Environment

Learners suggest that recruits are to be assured that in the learning situation they can work at their own pace ("Learners can do their own thing. Class is not competitive"). Retention of learners, to date, has been good. To continueand enhance this situation education staff recommend that learners are helped to think about their long-term goals, and be provided with guidance on how tc put them into practice. Two of the three individuals who stopped the program gave "other commitments" as the reason. One of the three listed a variety of reasons: time of day, felt pressured in math class and didn't like the schedule posted in the supervisor's office. The one employee who was interviewed for the program but didn't register said it was because of "personal things." Finally, one instructor says neither instructors nor learners should feel guilty if employees find they are unable to continue in the program.

Supervisors suggest to tailor program to individual interests, and no pressure to get GED. They suggest to continue the program through the summer. One supervisor commented: "Learners need to be internally motivated to attend."

c. Distributing Program Information

The project team suggest more publicity and recruitment are necessary. The project team, learners, supervisors and educators suggest that learners become more involved in these activities. Use former learners as well as department managers to talk about benefits they have seen or experienced as a result of the program. The education staff recommend using as much personal contact as possible to recruit. Word of mouth is always a good recruitment method.

In addition to personal contact, the groups interviewed recommended the following activities: develop a workplace education handbook, provide awareness workshops, use classified section in VINE because it is read frequently, wear the workplace education buttons, have activities during education week and a booth on volunteer day. Supervisors suggest to handle workplace education "like any other staff development activities (e.g."advertise, people sign up"). Education staff suggest providing ongoing education about workplace education and "literacy" generally. Furthermore, the team and education staff observe that some union relationships need strengthening and that the program staff are to be sensitive to union concerns and jurisdictions.

v. Summary

Workplace education has been successful, to date, in meeting learner needs. To continue to enhance the quality of programming for learners and the organization, suggestions include more choice of class times and topics. More communication and information, particularly for supervisory staff, is noted. Recruiting strategies are to be expanded and increased. Furthermore, workplace education should have the same status as other Training and Development Programs.

vi. Conclusions

- The on-site location is convenient and accessible for employees, however, a permanent classroom and office are required.
- The no cost policy increases access for employees.
- Employees like the option of working with tutors as well as the "learner-centred" approach which encourages input from learners into content, materials, homework and so forth.
- Instructors and tutors can feel a sense of professional isolation. They need support within VGH and from colleagues in other organizations.
- Scheduling of classes is important. The time of day and/or other priorities may cause some employees to discontinue the program.

The evaluation team set out to gather information on the worth of the program and how it could be improved. The findings have been summarized into four major questions. Conclusions resulted from these summaries. Next, the team shares some of their thoughts. The final section lists recommendations which follow from the conclusions.

F. The Project Team Reflects

Many employees volunteered time to share their personal and professional experiences with workplace education. Their willingness to provide input is appreciated. The team thanks all employees who participated in this evaluation.

An evaluation of this nature captures much that is important in the program, but there is no way of knowing all the many ways employees' lives and work may have been affected or changed. We are fortunate when employees tell us.

- A participant of the 90-91 program is near completing a degree at Dalhousie University
- A participant of the 92-93 program has recently enroled in the VGH nursing program.
- Her first public presentation was at the closing ceremonies of workplace education. This employee now gives presentations on CQI.
- Her first public presentation at the hospital was delivered at the closing ceremonies. She recently wrote and delivered a talk on Ward Aide day.
- Four former learners are enlisted in the tutor training and are eager to help other hospital employees who want to increase or refresh skills.
- Although we have no way of knowing exact numbers, many employees have successfully written their GED over the past three years.

All of the above continue to be either part or full-time employees at the VGH.

The following recommendations are intended to maintain and enhance the workplace education program - a program dedicated to developing those skills and self-confidence that are a prerequisite for increased morale, team work and better overall performance in the workplace.

V. RECOMMENDATIONS

A. Introduction

The following short-term recommendations should be implemented prior to starting the 93-94 workplace education program.

The long-term recommendations will take time to develop and implement. However, the project team, coordinator, and instructor, should begin to work on them immediately. An overall plan which develops goals and a time-line for implementing these long-term recommendations should be established with the first or second meeting of the project team in the 93-94 workplace education term.

Those recommendations which involve hospital personnel other than workplace education staff and project team are suggestions put forth for their consideration.

B. Short-Term Recommendations

Classes are to continue to be held on-site but in a location that does not require moving the class from room to room.

Option A: Get a large room for classes that has a phone and space for administrative work and files.

Option B: Provide an office space and a separate classroom. Both are to be dedicated to workplace education only.

Continue: To offer a tutor training course and have volunteers work one-on-one with learners.

To build a library of materials

To have the coordinator, instructor and tutors available to assist learners and supervisors with scheduling arrangements and any other needs.

Increase instructor's hours for one-on-one program-related counselling and extra academic assistance.

Offer greater flexibility in terms of class times to accommodate shift and personal demands. Potential learners are to continue to have input into most suitable class times.

Provide the option of more time for each class/learning session. Each class negotiates how much time it needs/has available.

Encourage tutors to help in group math classes as the instructor sees the need.

Give supervisors a minimum of two week's notice of class start date and schedules.

Supervisors should be kept informed about the program in general, whether or not they know identities of individual participants..

The coordinator and instructor should expand the current practices for recruitment, orientation and retention. Incorporate suggestions set forth in this report.

C. Long-Term Recommendations

Develop clear guidelines about confidentiality.

Option A: Supervisors know identity of learners, who are able to attend partly on hospital (release time).

Option B: Supervisors do not know identity of learners who then participate on their own time.

Supervisors should maintain confidentiality but continue to support employees.

The project team should propose a 50/50 release-time policy, with the hospital's share being either release time or equivalent. But consider ceiling for the maximum number of hours an employee attends classes.

Develop a handbook for all levels of employees which outlines the purpose and practice of workplace education.

Develop awareness workshops for supervisors. Within these activities, clarify how supervisors should respond if an employee approaches them with a basic skill problem.

Involve supervisors experienced in workplace education as co-facilitators in awareness sessions.

Expand the topics and have more mini-courses. Memo-writing, telephone skills, public speaking, and report writing are some suggestions. These short sessions will decrease schedule re-adjustments on the work-site and reach more people with special needs and interests.

Include purchase of a computer in selection of equipment and materials.

Investigate resources to assist learners with information about continuing education. Start with Nova Scotia Community College (NSCC) and Employee Assistance Program (CARE) and unions.

Investigate other funding partners. Funding may be sought for specific activities in contrast to overall program development.

Continue to search for sources .(time and funding) for professional development.

Workplace education instructor should be full-time staff member with the Department of Training and Development.

The status of Workplace Education is to be raised to that of other training programs in the hospital.

D. Summary Statement

The evidence shows that overall, the workplace education program has worthwhile goals. The achievement of such goals has benefitted individuals and the organization. In addition, unanticipated but welcome outcomes have resulted. Implementation of the short and long term recommendations will ensure that not only will quality programming continue but some areas of the program will be improved and expanded.

A special characteristic of this evaluation is that the team has been involved in the entire process. They planned the strategy, conducted the interviews and analyzed the data for conclusions and recommendations. This unique approach ensures that the evaluation questions: "...stem from the information needs of relevant and identified decision makers and information users." (Patton, 1978, p. 201). Furthermore, the skills gained by the employees involved in this process, remain within the organization, for application in other areas.

The project team is to be given credit for their hard work and dedication to a program which has touched the lives of many and made significant changes in the lives of others over the past three years.

The Victoria General Hospital is to be commended for providing such a program. Since implementation of this evaluation, increased funding has been approved for 1993-94.

APPENDIX:

Steps in the Process [p.25]
Planning Questions [p.26]
Data Gathering Questions [p.27-29]
Data Gathering Plan [p.30]
Chart of 92-93 Learner Goals [p.31-36]

STEPS IN THE PROCESS

Jan. 27	Christine gives presentation on the reasons to evaluate workplace education, the benefits of team approach and commitment required. Team consents to proceed.
March 2	Team discusses and analyzes concept of evaluation.
March 9	Team discusses why an evaluation is useful for the program.
March 29	Workshop (Paul & Sue) - explored all aspects of program and began evaluation strategy
April 5	Meeting with Learners Goals charted
April 19	Workshop (Sue and Paul) Developed Action Plan
April 29	Team discussed plan
May 3	Team divided up tasks of data gathering
August 6	Workshop (Paul and Sue) Analyzed Data for conclusion and recommendations
	REPORT

PLANNING QUESTIONS

Questions for Victoria General Hospital Planning Session on a Team Approach toEvaluation

Please complete this questionnaire as fully as possible. It will help us design a workshop to meet your needs. There is no right or wrong answer, just your ideas and opinions.

Name: ______________________________ Position: ______________

PART I: Background Information

1. What is your role in the workplace education program?
2. What kind of assistance do you feel the project team needs in developing an evaluation strategy?
3. Who are the interests groups (stakeholders) involved in the workplace education programs?
4. What are the goals of the workplace education programs?
5. What sort of evaluation activities have taken place in the last three years?
6. What were you attempting to evaluate? Why?
7. What did you find out from any evaluation activities that were undertaken?

PART II: Developing an Evaluation Strategy

1. What do you want to find out through an evaluation of the workplace education program? (For example, you might want to find out if program participants have met their own goals or you might want to find out if there has been more employee involvement back at the workplace)
2. Given what you want to find out, what would you see as indicators that the program has been successful? (If you chose employee involvement, an indicator of success might be more program participants on workplace committees)
3. Who or what would be sources of information for what you want to find out in terms of indicators of success? (If you chose employee involvement, you might choose program participants as a source of information)
4. How might you get the information you want? (For example, you might interview program participants individually or talk to them as a group)

DATA GATHERING QUESTIONS "A"

Learners	Management	Education Staff and Tutors
The overall goal of the workplace education program is...(quote goal statement). How well has this goal been achieved on a scale of 1 to 10 (1 = "not very well," 10 = "extremely well"). Please give reasons to support your rating.	Team did not ask management this question	The overall goal of the workplace education program is...(quote goal statement). How well has this goal been achieved on a scale of 1 to 10 (1 = "not very well," 10 = "extremely well"). Please give reasons to support your rating.
What are your personal goals for the program? How well have you achieved them on a scale of 1 to 10?	What kinds of changes have you seen in your employees?	What were the main goals of your learners? How well were they able to achieve them, on a scale of 1 to 10?
What did you learn in the program?&v	What impact has the program had on your department?	What did they learn in the program?
What were you hoping to achieve that you didn't?	What, if anything, wasn't achieved that you hoped would be?	What, if anything, wasn't achieved that you hoped would be?
What did you achieve that you weren't expecting to?	What were any unexpected outcomes?	What were any unexpected outcomes?
What do you like about the program? (see as strengths of the program)	What is your understanding of goals/ purposes of the program? What evidence do you see these goals are being met?	What do you see as strengths of the program?

BEST COPY AVAILABLE

DATA GATHERING QUESTIONS "B"

Learners	Management	Education Staff and Tutors
If there was something you could change about the programs, what would you change in the following areas? a)course content and activities b)teaching style c)scheduling - length of program - number of classes per week d)class location e)extra assistance f)availability of instructor	How could the program be improved in the following areas: a)scheduling b)length of program c)number of classes per week d)class locations	How could the program be improved in the following areas: a)scheduling b)length of program c)number of classes per week d)class location e)office space f)personal, professional benefits for instructors, tutors
Recruitment, Orientation, Retention a)How could the program better recruit new learners? How could the program advertise itself? b)How could program help potential learners be more comfortable? c)How could the program keep students from leaving?	How could the program better recruit new students, advertise the program and retain students	How could the program better recruit new students, advertise the program and retain students
Continuation and expansion: a)Should the program be continued in the future? Why or why not? b)Should the program be expanded in the future? Why or why not?	Continuation & expansion: a)Should the program be continued in the future?Why or why not? b)Should the program be expanded in the future? Why or why not?	Continuation and expansion: a)Should the program be continued in the future? Why or why not? b)Should the program be expanded in the future? Why or why not?

BEST COPY AVAILABLE

DATA GATHERING QUESTIONS "C"

Project Team	**Discontinued Participants**
1. What are program goals?	People who chose not to participate after initial or second interview and those who started but discontinued.
2. What has been accomplished to date?	1. Please comment on why you chose not to participate or stopped.
3. What do you see as the program's strengths?	2. What might you hope to have achieved by participating?
4. What suggestions do you have for improving the program?	3. What changes in the program would you recommend in the following areas: a) schedule b) help with personal needs (e.g. child care) c) content of course d) make-up of student body e.g. genders

396

395

DATA GATHERING PLAN

	Jessie	Christine	Angie	Carlotta	John	Dale	Jane
Interview (92-93) learners tutored		3					
Interview 91-92 learners				3		5	
Focus group 92-93 learners			8				
Focus group supervisors some 91-92 most 92-93							6
Interview - chose not to participate before start of program or stopped 91-92		1 by phone					
Interview - chose not to participate before start of program or stopped 92-93	1 2						
Interview Education Staff					1		

- Project team (8 in discussion group March 29) facilitated by Paul & Sue
- Questionnaires supervisors (1 could not attend focus group)
- Questionnaires Education Staff (3 filled out the questionnaires)

CHART OF 92-93 LEARNER GOALS "A"

	G.E.D. GOAL	MATH GOALS	COMMUNICATION GOAL	SELF-ESTEEM GOALS	TEAMWORK GOALS
ON-THE-JOB WORK RELATED	• to go on to other courses • to be able to apply for more/other jobs • better educated for a better paying job • for more opportunity • more courses to upgrade my skills for workplace • to move on to a different job	• can always use basic math skills • accurate use of percentages	• I want to express myself clearly • to write reports and memos • to communicate with other dept's. and enjoy it • learn to spell better • to get my point across, in writing • to document work projects	• to express an opinion clearly and accurately • to feel more comfortable on the job • to be able to talk with confidence and to feel equal • I want to be more assertive • to be able to "stand up" on the job • I want to feel equal	• to help work as a team • to practice working as a team

CHART OF 92-93 LEARNER GOALS "B"

	G.E.D. GOAL	MATH GOALS	COMMUNICATION GOAL	SELF-ESTEEM GOALS	TEAMWORK GOALS
PERSONAL	• I want to be able to say I have Grade XII • getting Grade XII is important to me • so I can take night courses	• to balance check-book • to balance accounts • to pay bills • to shop with less apprehension • to understand discounts • to learn how to work with fractions • to learn how to do my income tax • to learn how to do decimals and problems • to teach my children	• I want to be able to come across the right way • to understand meaning of words and phrases • to learn to write letters to insurance companies • to express myself more clearly to others • to do more effective creative writing • to help grandchildren and children with homework • to be able to write letters	• to feel more confident about myself • to feel better about myself about learning • to be able to set and achieve goals • my self-esteem is low - I'm hoping this is a start • to like myself more • it feels good to learn • I will feel better about myself knowing I can spell and write	

BEST COPY AVAILABLE

CHART OF 92-93 LEARNERS GOALS "C"

	G.E.D. GOAL	MATH GOALS	COMMUNICATION GOAL	SELF-ESTEEM GOALS	TEAMWORK GOALS
PERSONAL		• I want to improve skills so I don't get taken advantage of as a consumer	• to read and write better • to paragraph my writing • to listen better • to express how I feel in writing • to write essays • to accept criticism of my writing • to write more clearly • to speak better English • to understand what others are saying	• to learn more - I like learning	

CHART OF 92-93 LEARNER GOALS "D"

	G.E.D. GOAL	MATH GOALS	COMMUNICATION GOAL	SELF-ESTEEM GOALS	TEAMWORK GOALS
PERSONAL			• to write poetry • to interpret others' writing • to talk to people in a polite way by changing my vocabulary • more self confidence with English language • I will go on to learn a second language		

CHART OF 92-93 LEARNER GOALS "E"

	G.E.D. GOAL	MATH GOALS	COMMUNICATION GOAL	SELF-ESTEEM GOALS	TEAMWORK GOALS
COMMUNITY			• I'd like to become involved in politics • I'd like to do more volunteer work • to read out loud without blushing in front of a group	• to help others with learning problems • want people to like me for myself • to build enough self-esteem to become involved in other committees	

408

407

REFERENCES

Grotelueschen, A.D. (1980). Program evaluation, in Knox, Alan B and Associates. Developing, Administering, and Evaluating Adult Education. San Francisco: Jossey-Bass.

Houle, C. (1982). The Design of Education. San Francisco:Jossey-Bass

Jurmo, P. (1992). A Team Approach to Evaluation and Planning: A Handbook For Workplace Educators in a Changing Workplace. Pilot Edition, Literacy Partnerships, Jersey City, New Jersey.

Patton, M. (1978). Utilization-Focused Evaluation. California: Sage Publications, Inc.